

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1355.—VOL. XXXI.

LONDON, SATURDAY, AUGUST 10, 1861.

{ STAMPED.....SIXPENCE.
{ UNSTAMPED...FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER,

No. 1, FINCH LANE, CORNHILL. (Established 17 years.)
Mr. Crofts is a BUYER of shares in the following mines (cash on receipt of transfer, or on exchange made for other shares):—Brynford Hall, Herward United, Great Martha, Great Caradon, Great South Tolgus, East Basset, Herodfoot, Wheel Norris, Marke Valley, West Retallack, Old Tolgus United, North Miners, Charlotte United, Tolvadden, and North Downs.
FOR ABSOLUTE SALE, at any reasonable offer:—10 St. Ives Wheel Allen, 10 Cardiganshire Consols, 23 Rosewarne and Herland, 15 Wheel Prosper, 50 Prosper United, 100 Nantoes and Penrhin.
The action of the late Lamheroo Wheel Maria Mine, now leased by the EAST WHEEL MARATHA COMPANY, in 6000 shares, has excellent chances of success. Mr. Crofts having acted as secretary to the Lamheroo for nearly ten years is acquainted with the merits of the new mine, and will answer enquiries from the investing public.
* Holders of mining shares DIFFICULT OF SALE in the OPEN MARKET may hear of purchasers, and also parties IN ARREAR OF CALLS, or sued by merchants, may learn their true legal position and be advised how to act, by applying to Mr. Crofts.
* Every description of LIFE and FIRE SHARES BOUGHT AND SOLD.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET,

LONDON, E.C.
JAMES LANE has FOR SALE, at net prices:—20 Alfred Consols, £1 1/4; 50 Birch Tor and Vetter, £2 3/4; 10 Cornubia, 12s. 6d.; 25 Crebore, 11s.; 50 Dale, 15s.; 10 East Caradon, £2 1/4; 20 East Russell, £3 3/4; 50 Great Martha, 28s.; 25 Great Retallack, 21s.; 5 Gomanens, £2 1/4; 2 Herodfoot, £3 3/4; 50 Lady Bertha, 16s.; 5 Ludcott, £2 3/4; 4 Mary Ann, £2 3/4; 20 Marke Valley, £2 3/4; 20 North Hallenbeagle (£1 paid), 25s.; 10 North Downs, £5; 20 North Nant-y-Mwyn, 5s.; 10 Penhale Moor, £1 1/4; 20 South Condurrow, 14s.; 2 Trelawny, £13 1/2; 20 Worthing, 14s. 6d.; 2 West Caradon, £4 1/2; 5 Wheel Anne, 21s.; 25 Ridden, 5s. 6d.; 20 Sorridge, 13s. 6d.; and 5 West Rhesmor, £12.
Mr. Lane is a BUYER of Ashburton United, Marke Valley, East Caradon, and West Rose Down.

PETER WATSON, ENGLISH AND FOREIGN STOCK,

SHARE, AND MINING OFFICES,
79, OLD BROAD STREET, LONDON, E.C.

Telegraphic messages to Buy or Sell Mine Shares punctually attended to.

MR. W. LELEAN, MINE SHAREBROKER,

11, ROYAL EXCHANGE, LONDON, E.C.

MR. J. S. PHILLIPS, C.E. AND M.E., SHAREBROKER, &c.,

12, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MR. T. ROSEWARNE begs to inform his friends that he has

REMOVED from 81 to 75, OLD BROAD STREET.
T. ROSEWARNE has business to transact in the following shares:—
Bedford Consols. Gawton United. Sorridge Consols.
Calstock Consols. Granbler & St. Aubyn. South Caradon Hooper.
Drake Walls. Lady Bertha. Stray Park.
East Caradon. North Robert. Wheel Arthur.
East Grenville. North Downs. Wheel Edward.
East Russell. Pelyn Wood. Wheel Norris.
Devon Consols. Providence. Wheel Moyle.
Orders per post or telegraph promptly attended to.
Bankers: Bank of London.

REMOVAL.—GEORGE RICE, SHAREBROKER, has

REMOVED from 10, ANSTINFRIARS, to more convenient offices, No. 1, FINCH LANE, CORNHILL. SPECIAL BUSINESS IN—
Caradon Consols. Great Retallack. Sorridge Consols.
East Russell. Herodfoot. Tolvadden.
East Grenville. Lady Bertha. West Caradon.
East Caradon. Marke Valley. Wheel Unity.
FOR SALE:—30 Brookwood, 12s. 6d.

MR. R. H. M. JACKMAN, MINING AND SHAREBROKER,

No. 2, ADAM'S COURT, OLD BROAD STREET, E.C.,
BUYS or SELLS EVERY DESCRIPTION OF MINING SHARES at net prices, or on commission.
Shares advertised for sale free of charge. A daily list, with the closing prices, sent gratis on application. Telegraphic messages to buy or sell shares punctually attended to, and answered immediately, if required.
Aug. 9, 1861. Bankers: London and Westminster, Lothbury.

JOHN RISLEY, SHAREBROKER,

32, LOMBARD STREET, LONDON, E.C.

WILLIAM SEWARD, MINING BROKER, STOCK AND

SHAREDEALER, 26, THROGMORTON STREET, LONDON, E.C.
Commission, 1 1/2 per cent. on £100 and above, and 2 1/2 per cent. on less sums.

MR. THOMAS SPARGO, SHAREBROKER,

224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

Commission, 2 1/2 per cent.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, AND

MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), continue to TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. HORLEY and Co. publish a Weekly Mining List, with the closing prices, every Wednesday, and will be most happy to forward the same (gratis) on application.

MR. GEORGE BATTERS, 5, COWPER'S COURT, BIRCHIN

LANE, DEALER IN BRITISH MINING SHARES AND OTHER SECURITIES.
Mr. BATTERS, from long experience and intimate acquaintance with all Mining Stocks, can advise as to investment of capital, at closest market prices, and has made a selection of Dividend paying and sound Progressive Stocks in which he can with confidence recommend investments at present depressed prices. The favourable turn in the market for metals, and the reduction in the Bank's rate of interest, would point to prices having seen their lowest for the present.

FOR SALE:—5 Cook's Kitchen, £27 1/2; 20 Mark Valley, £20 1/4; 4 West Bryn Gwlog, £29 1/4; 30 East Caradon, £24 1/4; 100 Great Martha, 28s.; 75 North Miners, 32s.; 6 Billins, £18 1/2; 20 New Treleigh, 35s.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL

EXCHANGE BUILDINGS, LONDON, E.C. (Established 14 years), has FOR SALE at net prices the following shares:—100 East Grenville, 40s.; 25 Great Wheel Bury, £34; 10 Marke Valley, £29 1/2; 75 Great Wheel Martha, 27s. 9d.; 50 Unity; 2 East Basset, £7 1/2; 2 West Caradon, £42; 5 East Caradon, £24 1/4; 25 North Downs, £4 1/2; 5 West Bryn Gwlog, £21; 50 Great Retallack, 19s. 6d.; 40 Lady Bertha, 15s.; 3 Herodfoot; 25 Wheel Norris, 39s.; 25 Tolvadden; 25 Crane; 2 South Frances, £120; 20 North Miners, 32s.; 5 Providence; 5 Old Tolgus United, £15 1/2; 100 Trevelloe, 7s.; 200 Crowmyn, 6s. 6d.; 25 Charlotte United; 3 Cook's Kitchen, £18; 100 Bon Accord, 22s. 6d.; 20 Pendoen, £5 1/4; 25 Trelawny, £3 6s. 6d.; 40 New Treleigh, 35s.; 25 Deep Level, 8s.; 30 Great South Tolgus; 100 North Nant-y-Mwyn, 4s. 6d.; 50 Buller and Basset; 2 Buller, £25; 3 Billins, £17; 4 North Trekerby, £21; 100 South Condurrow; 30 East Devon Consols, 38s. 6d.; 15 Wheel Ludcott, £2 3/4; 100 Worthing, 14s.; 1 West Seton, £205.
Sellers of all description of mining shares difficult of sale, likewise holders of life and fire insurance shares, may find purchasers through Mr. Budge.
Daily lists of prices forwarded on application.

FIFTEEN TO TWENTY, and even TWENTY-FIVE PER CENT. PER ANNUM upon current value of shares, in CORNISH TIN and COPPER MINES.

Dividends payable two-monthly or quarterly.

MESSRS. TREDINNICK AND CO., MINING ENGINEERS,

SEND their SELECTED LIST OF SOUND PROGRESSIVE AND DIVIDEND SHARES upon the receipt of a Fee of One Guinea.
Review of Cornish and Devon Mining Enterprise, 5s. per copy.
Maps per post of the Buller and Basset, Great Vor, Alfred Consols, the Providence and Margaret Districts, 2s. 6d. each.
Cornish Mines, well selected, pay better than any other description of securities, are free from risks, and entail less responsibilities than banks and other joint-stock companies. Shares bought and sold on commission of 2 1/2 per cent.
Money advanced at 10 per cent. annually, for short or long periods, upon approved Mining Shares.—78, Lombard-street, London, E.C.

BRITISH AND FOREIGN STOCK, RAILWAY, AND MINING

SHARES BOUGHT AND SOLD. A considerable amount of money is locked up in mining shares not prominently before the public, and consequently difficult of sale. Messrs. FULLER and Co., 26, CHANGE ALLEY, CORNHILL, LONDON, invite the holders of such stock to communicate with them, having channels for the purchase and sale of shares of every description, independent of the mining market.
FOR SPECIAL SALE:—Messrs. FULLER and Co. have £6500 worth of shares on hand, paying regular dividends of from 12 1/2 to 15 per cent. Also, £2750 worth of progressive shares, upon which from 200 to 300 per cent. profit may be realised in a few months, and perfectly free from risk. Full particulars may be had.
Telegraphic messages promptly attended to.
Bankers: Bank of England.

GEORGE MOORE,

1, CROWN COURT, THREADNEEDLE STREET.
In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at

the prices quoted, and FREE OF COMMISSION:—

10 Alfred Cons., £1 7s. 9d.	10 Holmbush, £1 12s.	1 South Caradon, £302 1/2
1 Basset, £52 1/2	60 East Kongsberg (fully paid up £25), an offer wanted.	1 St. Ives Cons., £32.
1 Bryn Gwlog, £27 1/2		60 Sorridge Cons., 12s. 9d.
5 Billins, £18.		20 St. Day, 11s. 9d.
1 Buller, £57 1/2		25 Stithney Carmmeal (an offer wanted).
10 Bottle Hill, 7s. 9d.	5 Cumberland Black Lead (£4 paid), 29s. 6d.	2 So. Bryn Gwlog, £13 1/2
2 Carn Brea, £67 1/2	2 Kitty (Lelant), £7 1/2	1 South Basset, £12.
1 Cobre, £36.	10 Kelly Bray, 16s. 9d.	2 South Wheel Frances, £122 1/2
30 Cefn Cileon, 12s.	40 Lady Bertha, 17s. 9d.	2 Silver Hake, £17.
10 Camborne Vein, 36s. 9d.	40 Lady Eliza, 10s. 9d.	50 Ridden, 5s.
5 Craddock Moor, £23 1/2	10 Linares, £7 1/2	30 So. Herodfoot, 19s. 6d.
40 Carn Camborne, 21s.	4 Long Rake, £10.	2 West Caradon, £40 1/2
5 Caradon Cons., £7 1/2	15 Ludcott, £25 1/2	20 West So. Caradon.
2 Cargoll, £14 1/2	5 Marke Valley, £29 1/2	50 Silver Bank (16s. paid) 10s.
3 Calvadnock, £7 1/2	3 Mary Ann, £9.	2 Trelawny, £14 2s. 6d.
2 Cook's Kt., £27 10s.	30 North Miners, 31s. 9d.	40 Trumpet United, 8s. 6d.
40 Crookhaven.	5 North Basset, £2 19s. 6d.	20 Tamar Cons., £1 13s. 9d.
45 Coed Mawr Pool (offer wanted).	3 North Trekerby, £21.	25 Ud. Mexican, £4 17 1/2
20 Cuddra, 37s.	5 North Downs, £4 19s. 6d.	30 Vale of Towry, 4s. 10d.
50 Dale, 13s. 9d.	10 North Robert, 16s. 6d.	4 West Rose Down.
20 Deep Level.	20 New Treleigh, £1 13s. 9d.	15 West Stray Park, £5 1/2
10 Drake Walls, 13s. 6d.	4 Herward Utd., £7 18s.	1 West Sharp Tor, £36 1/2
1 Devon Great Cons., £55	20 North Exmouth, 3s.	1 Wheel Harriet.
10 East Russell, £3 14s. 9d.	1 New Seton, £46.	20 Wheel Crebore, 11s.
5 E. Carn Brea, £7 10s.	50 North Rhine, 7s. 6d.	2 Wh. Margaret, £1 1/2
25 East Grenville, 40s. 3d.	10 North Dolcoath, 6s. 6d.	5 Wh. Edward, £1 16s. 9d.
5 East Caradon, £24.	30 Nant-y-Iago, 14s. 9d.	5 Wheel Unity, £4.
20 English and Australian Copper, £3 7s. 6d.	100 North Down and Rose (offer wanted).	10 West Providence.
30 East Providence (offer wanted).	35 North Providence (offer wanted).	20 West Polmar, 17s. 9d.
50 East Wheel Martha.	15 North Gwilyf, £5 18s. 9d.	1 Wheel Clifford, £155 1/2
20 East Devon, 37s.	10 New Frances, 9d.	40 West Tolcarne, 8s. 6d.
20 East Alfred, 36s. 9d.	3 North Roskear, £19.	1 Wheel Seton, £66.
5 Gt. S. Tolgus, £3 2s. 6d.	5 Old Tolgus, £16 1/2.	10 Wheel Moyle.
2 Grambler, £10 1/2	40 Penhale Moor (an offer wanted).	10 Wheel Hearle.
20 Great Alfred, 9s.	30 Port Phillip, 21s.	30 Worvas Downs (offer wanted).
40 Gt. Wh. Martha, 27s. 9d.	1 Providence, £34 1/2.	10 West Tolgus.
5 Gomanens, £2.	2 Rosewarne Utd., £22 1/2.	
50 Great Vor.	10 Rosewall Hill & Ransom, 24s. 9d.	
40 Great Northern Copper, 25s. 6d.	50 Retallack, 2s. 9d.	
2 Great Fortune, £11 1/2	15 St. John del Rey, £25 1/2.	
20 Great Retallack, 17s. 9d.	5 S. Carn Brea, £3 7s. 9d.	
10 Hings, Down, £1 17s. 6d.	4 Stray Park, £31 1/2.	
3 Herodfoot, £24 1/2.	50 South Condurrow, 10s. 9d.	
	10 So. Caradon Hooper, 16s.	

And is a BUYER of West Bryn Gwlog, North Miners, West South Caradon, Wheel Moyle, and North Wrey.
OLD TOLGUS UNITED.—The improvement in this mine continues, and capitalists should direct their attention to its merits.
2, Adam's-court, Old Broad-street, August 9, 1861.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD

STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS OF MINES, COMMISSION, AND GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, AND EVERY OTHER DESCRIPTION OF STOCK.
Commission on share transactions, 1 1/2 per cent. on £100 and above, and 2 1/2 per cent. on less sums.

MR. C. POWELL, MINE SHAREBROKER,

2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C.

MR. EDWARD COOKE, 5, HERCULES PASSAGE,

THREADNEEDLE STREET, LONDON, E.C., will feel much pleasure in advising those who may favour him with their confidence on the merits of the various mines usually dealt in, and also on any new concerns that are from time to time brought before the notice of the public. Much loss and disappointment may be prevented by a proper amount of caution on the part of the investor. From frequent personal visits into the mining districts, together with many years' experience of the mining market, EDWARD COOKE hopes to be enabled to render sound advice to parties availing themselves of his services, and prompt cash in all transactions entrusted to his charge.
PURCHASES AND SALES IN RAILWAY AND ALL OTHER SHARES effected at the usual commission.
Aug. 9, 1861. Bankers: London and Westminster, Lothbury.

MR. J. SYKES, LEEK, STAFFORDSHIRE, is in a position to

advise speculators as to the purchase of shares which will increase in value 100 per cent. in twelve months. The opportunity should not be lost. He will guarantee 25 per cent. of the loss, if he be allowed 25 per cent. of the profits.

RICHARD CLIFT, MINE SHAREDEALER,

late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. JAMES HAMMON, STOCK AND SHAREDEALER,

1, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. E. GOMPERS, MINING OFFICES,

3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

BUSINESS TRANSACTIONS IN BRITISH AND FOREIGN STOCKS AND SHARES. Terms, 1 1/2 per cent.—Bankers: London and Westminster Bank.

JOHN GLEDHILL AND CO., MINE AGENTS AND

SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS.

MESSRS. THOMAS PENROSE and THOMAS PRICE

UNDERTAKE ASSAYS AND ANALYSES OF EVERY DESCRIPTION OF MINERAL PRODUCT, FUEL, AND MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea.

STOCK AND CO., LEAD AND SILVER SMELTERS,

PENCLAWDD, NEAR SWANSEA.

MESSRS. C. TOOKEY, F.C.S., AND M. W. JOHNSON, F.C.S.,

ASSAYERS, ANALYSTS, AND CONSULTING CHEMISTS.
LABORATORIES, 44, LINCOLN'S INN FIELDS, W.C.

BELL BROTHERS beg to intimate that, having become SOLE

LICENSEES in the United Kingdom of PAOR DEVILLE'S METHOD OF PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

NICKEL AND COBALT REFINING, AND GERMAN SILVER

WORKS, 16, OZZELL STREET NORTH, BIRMINGHAM.
STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—
REFINED METALLIC NICKEL. OXIDE OF COBALT. [WIRE, &c.]
REFINED METALLIC BISMUTH. GERMAN SILVER—IN INGOTS, SHEET
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND

CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

THE MIDLAND IRON COMPANY, ROTHERHAM,

MANUFACTURERS OF BEST "YORKSHIRE," and OF STEEL IRON TYRE BARS, for LOCOMOTIVE ENGINE, CARRIAGE, and WAGON WHEELS. Also OF REFINED, SCRAP, STEEL IRON and "YORKSHIRE" BARS, HOOPS, RAILS, ANGLE IRON, MALLEABLE SHAFTS, AXLES and FORGINGS.

CHARLES DAVEY AND CO.,

SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCAIRE.

MR. MURCHISON'S REVIEW OF BRITISH MINING

FOR THE QUARTER ENDING 30th MARCH, 1861, is NOW READY.
Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.

MR. T. P. THOMAS, MINING AGENT AND

AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL

MINING SHAREDEALER, 16, HACKINS HEY, LIVERPOOL.
The following SHARES have been placed in the hands of Mr. THOMAS FOR SALE, at the prices affixed, free of any commission:—
20 Mount Pleasant (div.), 10 So. Bryn Gwlog, £14 1/2. 30 North Crofty, £20 1/2.
234. 20 Crowmyn, 10s. 60 Carn Camborne, 21s. 6d.
100 North Miners, £1 1/2. 100 So. Condurrow, 12s. 6d. 400 Ridden.
100 Lower Park, 17s. 6d. 50 South Gernick, 4s. 6d. 60 Dulta (Tin, Limited).
100 Colomendy, £1. 10 Rosewarne and Herland, 100 East Kongsberg Silver.
10 Brynford Hall, £29 1/2. £1 5s. £5 fully paid up, at £3 1/2.
10 Herward United, £29 1/2. 20 East Seton, 3s. 6d.

JOHN R. PIKE, GENERAL SHAREDEALER,

3, PINNER'S COURT, OLD BROAD STREET, E.C.

FREDERICK WILLIAM MANSELL, MINING OFFICES,

1, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London Joint-Stock Bank.

MR. JOSEPH GREGORY, MINING OFFICES,

1, BANK CHAMBERS, LOTHBURY, E.C.
BUSINESS TRANSACTIONS IN BRITISH AND FOREIGN STOCKS AND SHARES. Terms, 1 1/2 per cent. on £100 and above, 2 1/2 per cent. on smaller sums.
Bankers: City Bank, Threadneedle-street.

DEVON NEW COPPER MINING COMPANY (LIMITED).—

THREE HUNDRED AND FIFTY paid-up (£2) SHARES in this mine TO BE SOLD, at £1 10s. per share.—Apply to Messrs. ELLIS and Co., 2, Royal Exchange-buildings, London.

A LARGE FORTUNE may be REALISED FOR ONE POUND

only.—For particulars, apply to Mr. FREDERICK SMITZ, banker, of Frankfurt-on-the-Maine, or letters addressed to him, 28, Clement's-lane, Lombard-street, London.

WANTED, by the advertiser, a SITUATION as BOILER

PLATE SHEARER. No objection to go abroad. Good references can be given.—Apply to "A. Z." Mining Journal office, 26, Fleet-street, London, E.C.

WANTED TO PURCHASE, a SECOND HAND or NEW

HIGH PRESSURE ENGINE, to drive a saw-mill. Engine to have two horizontal cylinders, about 20 in. diameter, stroke 3 to 4 ft.—Apply to W. O. JOHNSON, Seghill Colliery, near Newcastle-on-Tyne.

WELSH SLATE QUARRY SHARES.—WANTED TO

INVEST, about THREE HUNDRED POUNDS, in a genuine QUARRY, if leading to the directory preferable, but not indispensable.—Address, "G. S." care of Mr. Lindley, 19, Catherine-street, Strand.

HEMATITE IRON ORE.—WANTED, a SETT of this

MINERAL, near a shipping port or railway station.—Terms, with report or full particulars as to quality of ore and situation, to be addressed to "Fides," Messrs. Judd and Glass, New Bridge-street, Blackfriars, London.

COPPER AND LEAD MINES IN MONTGOMERYSHIRE.—

TO BE DISPOSED OF, IN SHARES, most PROMISING WORKS, within five miles of the contemplated railway to Llanfyllin from Oswestry.—Apply to Mr. ROLFE, solicitor, Llanfyllin.

SLATE QUARRIES, IRELAND, TO BE LET, OR SOLD, by

the owners in fee. Slates of bluish colour, and fine grained metal veins, inexhaustible. Constant water-power. Paying at present 30 per cent. Present samples equal to any Welsh. Situate four miles from Carrick-on-Suir (to which place the River Suir is navigable for vessels of 200 tons), and the railroad station 14 miles from the city of Waterford.—Apply to WM. DESPARD, Corraiganore, Waterford.

TO BE LET, with immediate possession, the HASLAND

COLLIERY, near CHESTERFIELD, now in full operation. The plant to be taken to at a valuation, to be made in the usual way.—For further particulars, and to treat, application to be made to ADAM KNOWLES, Esq., solicitor, Chesterfield; or to Messrs. WOODHOUSE and JEFFCOCK, civil and mining engineers, Derby.

TO COLLIERY PROPRIETORS.—ON SALE, about TWO

HUNDRED YARDS OF PUMP TREES, and WORKING BARREL, 16 in. bore, in 9 ft. lengths, nearly new. Price, £4 per ton, delivered on rails.—Address, Box F 34, Post-office, Manchester.

TO COLLIERY PROPRIETORS.—IMPROVED

SELF ACTING TIPLERS and SCREENS, for LOADING COALS at the PITS with dispatch, and ENTIRELY PREVENTING BREAKAGE. Manufactured by WILLIAMS and MOWLE, Egerton-street Foundry, Chester, where models and testimonials may be seen, and every information obtained. Prices moderate. Delivered at any railway station.

TO CAPITALISTS AND MINING AGENTS.—TO BE LET

ON LEASE, or SOLD, a VALUABLE COPPER ORE MINE, in the well-known mining district of CARDIGANSHIRE. This promises to be an advantageous investment, as several tons of rich ore have been raised.—Further particulars and satisfactory reasons for disposing of the above may be had on application to the proprietor, E. PRYCE JONES, 65, Tower-buildings, Water-street, Liverpool.

TO CAPITALISTS.—The PROPRIETORS of a FIELD of

ONE THOUSAND ACRES OF STEAM and BITUMINOUS COAL in SOUTH WALES (the latter being in full operation), possessing special advantages, are DESIROUS of JOINING any CAPITALIST PREPARED to INVEST £40,000 in the UNDERTAKING.—Apply to "A. B. M." Post-office, Bridgend, Glamorganshire.

TO ADVENTURERS IN FOREIGN MINES.—MR. HARRY

THOMAS VERRAN, of PLACENTIA, NEWFOUNDLAND, who has had considerable experience (under the tuition of his father, and in connection with many other experienced Mining Engineers) is ready to UNDERTAKE the EXAMINATION and REPORTING upon MINERAL PROPERTIES in Newfoundland, the United States, or any other country, where his services may prove useful to capitalists. The greatest confidence may be placed in Mr. VERRAN, who will use his best judgment in giving reliable information to those who may repose confidence in him.

HORIZONTAL STEAM ENGINES FOR SALE, one each of

Original Correspondence.

PRACTICAL PAPERS ON COLLIERY OPERATIONS—No. IX.
VENTILATION OF MINES.

SIR,—I omitted to state in my last letter that when fire-damp is mixed with only a small proportion of carbonic acid gas it renders the force of an explosion less violent, should one occur; and when the mixture contains one-fifth of carbonic acid it is rendered non-explosive. It may even be non-explosive with a less percentage of carbonic acid than the proportions stated, but the writer has not yet satisfied himself upon that point. He is speaking of gases collected in the mine, and not artificially produced. Carbonic acid gas is given off in great quantities in some coal mines, but it does not often happen that lives are lost in the working of a colliery by the accumulation of this gas, excepting the greatest recklessness is practised, as the candle will be extinguished in most cases before respiration is difficult, though much depends upon the strength of the constitution. The writer has himself fetched two men out of this gas on separate occasions, who would otherwise have been lost, without feeling the slightest ill effects from so doing. He has also known several men to become stupefied and fall down motionless from working in an atmosphere containing carbonic acid gas, but not in such quantities as to perfectly extinguish the light. If the workman is permitted to work for any length of time in an atmosphere where the candle will not burn unless it is placed horizontally, it must necessarily produce the worst effects upon the constitution of the most robust. Men are, unfortunately, often compelled to work for weeks together in an atmosphere of this kind in some collieries. It is not three months since the writer was passing through a district some distance from home with a case of plans under his arm, and in walking a distance of less than a mile was accosted by three colliers, from one and the same colliery; all made the enquiry, was I the Government Inspector? Each of them assured me that they had been working for weeks in an atmosphere where the candle would not burn within a dozen yards of where they were working, and if they could only have a good light they could earn plenty of money. I gave each of them the Inspector's address, and requested them to write to him, and in so doing considered I was performing a duty. One of the three told me he had got a shopkeeper to write to the Inspector at a previous period, and he came and inspected a portion of the workings, but, unfortunately, did not go to that part of the mine where the evil existed.

Upon the authority of Leblanc, a light is extinguished if the air contains from 4½ to 6 per cent. of carbonic acid gas, and that in such an atmosphere life may be kept up for some time, but respiration is oppressive. Upon the same authority we have it stated that if the air contains 1 per cent. of this gas, it is the maximum quantity for safety, and strongly recommends ventilation if the atmosphere of a room contains this proportion. These statements, however, do not agree with those made by other authorities. If we may judge from the evidence given some years ago by some London chemists on the effect of Joyce's stoves, it would appear that great diversity of opinion existed as to what quantity of carbonic acid is really life destroying. The quantity of air respired per minute is also a subject upon which authorities are divided. Some have stated the quantity to be 720 in. per minute, whilst Sir Humphry Davy only estimates the quantity at 338 in. The later experiments of Liebig and others have confirmed in a remarkable manner the correctness of Sir Humphry Davy's experiments. It has also been estimated that the amount of vapour exhaled per minute from the body varies from 30 to 45 grains. Liebig estimates that 14 ounces of charcoal is burned daily within the body, and states that the only difference between the combustion of a fire or candle and that of the various component parts of the human body is that in the latter the process is carried on much more slowly, yet not the less certainly. The air thus vitiated by the respiration or combustion of the human body is that which ought to be removed by an efficient system of ventilation. White-damp, or sulphuretted hydrogen gas, is said to be sometimes found in coal seams, but it is open to considerable doubt whether this gas has ever been found in the actual workings of a colliery. I have on two occasions known the so-called white-damp to be found; once in driving a tunnel, and once in sinking a shaft. In neither case was a current of air conducted within many yards of the point where the men were working. At the periods when the gas was found I was not capable of determining whether it was anything more than sulphurous acid, which is well known to form one of the elements of powder smoke, and a gas that is also given off in most coal measures. I should be inclined to doubt at the present time whether sulphuretted hydrogen gas is ever found in the mine, excepting what is evolved from the decaying of animal matter. There are many other sources of impurities in the mine besides those referred to, such as the heating of pyrites in the gob, or goaf, and the rapid decaying of animal excrement. From both these sources gases are evolved in large quantities, that are unquestionably injurious to the healths of those entering the mine, but especially to those who are compelled to spend a third of their lifetime in such an atmosphere.

The decaying of vegetable matter in the moist atmosphere of the mine is also another source from which the air is vitiated. It will, perhaps, be better understood how far the atmosphere of a mine may be affected through this source, if it is stated that at some collieries from 8 to 12 tons per day of timber is sent down one shaft, and by far the greater portion of it left in the gob to decay of dry-rot.

Many mines are worked at depths that fix the temperature at 70° and upwards. It may be well to observe that a part of the increased temperature is due to the density of the air, which increases with the depth: at a temperature of 74° an increase of 5° is due to the density of the air. I do not intend to enter into the minutiae of the effect produced on the atmosphere of the mine by the combustion of lights, the using of blasting powder, and the stench arising from almost stagnant water, and the dust arising from the operation of getting or hewing coal, as I consider the reader will already be convinced (if not previously so) that something more is required than perfecting the safety-lamp, so as to allow of its being used under all circumstances, and rendering it a substitute for deficient ventilation, as it certainly would do, if we may judge from what comes before the public. I deeply feel the responsibility of writing upon this important subject, especially so when I see such authorities as the late respected Herbert Mackworth, Blackwell, Dickinson, and others advocating the exclusive use of the safety-lamp; and that from force of conviction of the change being fraught with the direst evils, I am reluctantly compelled to differ in opinion from them. To me it appears to be the question that is to decide or determine whether the miner must be slowly poisoned, and be at the mercy of the most unscrupulous and unprincipled employer, and whether the miner is to lose all features of the sturdy, stalwart miner of the last generation. It is unquestionably the case that as a body they have lost much of that physical vigour for which they were formerly noted. Is this to be wondered at, seeing that the ventilation of collieries in many parts is conducted upon the same principle as when only a tithe of the men were engaged in one shaft, when the present depths were unthought of, and pits were sunk in such close proximity as they are yet to be seen at some old collieries? When the exclusive use of the lamp is insisted upon, and its merits spoken of in preventing loss of life, no cognisance is taken of accidents that may arise from working with an insufficient light, and thereby not being able to guard against accidents in the same manner as if a better light were employed.

It will be seen from what has already been adduced that no maximum or minimum quantity of air can be fairly fixed for the ventilation of a colliery, as what might be adequate to-day might be inadequate to-morrow at the same colliery; therefore it in a great measure depends upon the managers of collieries whether they are properly ventilated or not, as the present staff of Government Inspectors are quite unequal to the task of inspecting the number of collieries in their respective districts; in fact, much of their time is taken up at present in investigating the causes of explosions and accidents, rather than in examining, and offering suggestions to prevent such accidents occurring.

The methods of producing a current of air sufficient to meet the wants of an extensive colliery are simple and effective; for whether the furnace, steam-jet, or machine be used, an efficient quantity of air may be put into circulation to effectually ventilate most collieries, provided it is properly distributed or apportioned through the workings, and the operations of getting coal are systematically conducted. It is more a question of economy than of any of the methods being inadequate to put into circulation a sufficient quantity of air; that is, assuming that each of the before-mentioned methods of producing a current of air is well represented. I do not underrate the importance of exercising due economy in every department of colliery management, but I think if one system of producing a current of air is more effective than another, and on rare occasions it may be required, a slight extra cost ought not to stand in the way of the

most efficient system being employed. The bottom furnace is beyond doubt the most effectual system of obtaining a current of air that we are at present acquainted with, and probably the most economical. The simplicity of its application, and the almost impossibility of its getting out of order, give it an additional advantage over the best ventilating machines.

Mr. Struvé's Mine Ventilator is an effectual machine, and probably stands at the head of its class, but powerful objections may be raised against it being employed in lieu of the furnace. Perhaps the most prominent are that it does not possess the same adaptability of being applied to meet the requirements of the mine in case of emergencies, when more air may be required than the machine is capable of putting into circulation; that it is liable to have its parts deranged, however nicely the machine may be adjusted, especially so when it is considered that it has to be in constant motion, no one can doubt. If this should occur in a sudden and unexpected manner in a fiery seam, where naked lights are used, the most calamitous results, in all probability, would follow. Nor will it bear comparison with the furnace in point of economy, provided each is charged with all the items of expense that is incurred by it. It may probably do so providing nothing is put down for repairs of machinery, boilers, &c., and the expense of working the engine put down to the account for pumping water. In order that the bottom furnace may produce the greatest effect by the consumption of a given quantity of coal, it is necessary that it should be constructed as deep in the mine as possible, as then the heated column of air in the upcast shaft becomes of the greatest height. I refer to this from great numbers being built in mouthings, at not more than one-half the depth of the shaft, and in consequence losing much of the effect that would be produced providing they were placed at the bottom of the shaft. The furnace should be so constructed that the air can pass freely both under and over the fire, and the fire-bars should be 6 ft. at the least from front to back: the fire should extend over the first 4 ft. of the bars. If the furnace is built on a slight ascent all the better. The danger arising from setting fire to the adjoining strata has often been urged as an objection to the use of the furnace, but if it be properly constructed there need be no danger apprehended from this cause. It is often practicable to erect the furnace at such a distance from a coal seam as to render it impossible for it ever to be ignited by any heat that might be obtained at a furnace; if not, it is only necessary that two walls be built in lieu of one, the one next to the fire to be a brick breadth from the outer one, so that a current of air can always pass between the two walls, which will serve to keep the outer wall at a very low temperature. When it is necessary to keep the temperature of the upcast shaft at more than 100° of heat, no workmen ought to be compelled to ascend or descend such shaft, as it must have the worst effect upon the health, for it is there that all gases and impurities from the mine are collected, independent of the effect of the smoke and heat from the furnace. I have seen many men become sick and vomit by ascending and descending upcast shafts where a high temperature has been maintained. It is decidedly better to use an upcast shaft for no purpose but ventilation where the workings are extensive, as the effect produced by the same consumption of fuel is double and sometimes more than that when the upcast is free from those obstructions that must necessarily impede the progress of the air in a shaft that is used for raising coal as well as for an upcast. In mines at great depths from the surface this would materially add to the expense of getting coal, but matters assume such an aspect at the present time that the question of cost, so long as kept within reasonable bounds, can only be considered of secondary importance. The upcast shaft should invariably be upon the rise of the downcast, so that the furnace may be assisted by natural means as far as possible. In a fiery seam the advantage derived from having the upcast upon the rise of the workings is very considerable, but this will be more fully treated upon in the next paper. The upcast shaft ought to be bricked from top to bottom, and the bricks set in mortar, and all the water that percolates through the strata caught and properly conducted down the shaft in pipes. If this be neglected the useful effect of the furnace is much impaired.

The Steam-jet is far from being as powerful an agent as the furnace, but, nevertheless, a sufficient quantity of air may be obtained by the steam-jet to meet the wants of an extensive colliery. Diversity of opinion exists as to which way the steam acts in putting the air in motion; some have described it as acting by impulse or partial vacuum; but the great probability is that the principal effect obtained is by heating and rarefying the air, and thus causing the heated air to ascend. On the grounds of economy it will not bear comparison with either Mr. Struvé's ventilator or the furnace; it requires at least the consumption of four times the quantity of coal to produce the same effect as could be produced by the furnace; it is also open to the objection of making a wet shaft by the steam condensing; but from the small cost at which it can be applied where there is surplus boiler room, it affords a useful method of producing a current of air. The way that I have applied it has been to simply attach one or more pipes, of 1 in. diameter, to a boiler carrying 40 lbs. pressure, and conveyed down the shaft to such a distance as the heated column of air would be equal to putting into circulation the quantity of air required. To each of the pipes is attached a stop-cock, so as to allow of the steam being regulated or shut off if any repairs are required in the shaft. My reason for adopting this system is, that it is much more healthy and agreeable for the banksmen than when a furnace is employed. If engines are used for drawing coal up the incline of the mine, the exhaust steam and heat from the boiler furnaces, if conveyed into the upcast shaft, act as a good ventilating agent. The deeper the shafts are the greater is the advantage the furnace possesses over any of the ventilating machines.

Jos. Goodwin.

VENTILATION OF COLLIERIES.

SIR,—Your able correspondent, Mr. Jos. Goodwin, is, I am glad to see, impartial enough to give me credit for having propounded a system of colliery ventilation which looks as reasonable upon paper as any that has been brought forward; and as this opinion emanates from a practical man, I congratulate myself upon my excellent prospect of meeting with coal-owners of practical experience equal to that of Mr. Goodwin, and who, being desirous of doing their utmost to secure the safety of their workmen, will not permit a reasonable "proposition" to be passed by as useless until in practice it has been actually found to be so. I observe, moreover, that Mr. Goodwin "does not much doubt the feasibility of Mr. Hughes's method in sinking shafts or driving tunnels, or in working metallic mines; but whether it will bear comparison with other methods of ventilating in regard to economy, is a question that remains to be demonstrated." Here Mr. Goodwin expresses precisely my own opinion, and so confident am I both of its economy and efficiency that I am quite willing that my success should depend upon the satisfactory demonstration of Mr. Goodwin's problem, a demonstration which I confidently believe will be quickly arrived at, there being no doubt of the correctness of his assertion that there are colliery proprietors who are really desirous to render their mines safe and healthy.

Mr. Goodwin refers to the breakage of a pipe as something of a very serious character, but keeps from view the facts that it is an accident which would be easily remedied, and that the result, so far as the impeding of the ventilation is concerned, would not be more dangerous than the closing of the level if the pipe were not there. If the pipe were not actually compressed by the meeting of the floor and roof, the ventilation would continue, and if the floor and roof met the ventilation would, under ordinary circumstances, be stopped, whilst the tendency of the pipe would undoubtedly be to keep the air passage open. The pipes I propose to use will be of wrought-iron, connected together by band joints. I may here digress for a moment to refer to Mr. Brough's statement that 200,000 cubic feet of air per minute would not have prevented the Risca explosion. I respectfully submit that this opinion is erroneous, and that any mine which requires one-half that quantity of air to ventilate it is scarcely worth working for coal, as a far more valuable product would be obtainable. Thus, assuming even that gas is not rendered harmless with less than 20 times its bulk of atmospheric air, it follows that each 100,000 cubic feet of air passed into the mine would neutralise 5000 cubic feet of gas. Then, if the colliery give off 5000 cubic feet of gas per minute there would be a daily yield of (5000 × 60 × 24) 7,200,000 cubic feet, or an annual production of just 2,628,000,000 cubic feet of gas. The money value of this quantity of gas at 2s. per 1000 cubic feet (which is half the actual average price) would be no less than 262,800l. Now, if the colliery produced 500 tons of coal per day, worth at the pit's mouth 5s. per ton, the value of the coal would be only 45,625l., being only about one-sixth that of the gas. But I do not wish it to be supposed that I would advocate the working for gas instead of coal. I do not believe it would pay, but I give these figures to show that the mode usually employed for calculating the quantity of atmospheric air passing into a mine is erroneous. The thoughtless assertions made as to the quantity of air necessary to be passed into a mine

would really prove, were they true, that in a colliery nearly as much gas is obtained from each ton of coal without heat as is obtained above ground in our expensively constructed gas-works.

I think I may claim having studied the nature of gases rather minutely, and cannot see any reason to doubt the universally admitted fact that fire-damp is lighter than air. If, then, 10,000 cubic feet of pure air be discharged at the farther extremity of the bottom of the mine, will not the fire-damp necessarily be expelled to the surface. It is known, too, that "Nature abhors a vacuum." By forcing air into the top of a diving-bell, the water is kept out, but if it were attempted to keep the bell dry by pumping the water from near the bottom the result would be a failure, although the bell should be an inverted cone, so as to permit the largest possible ingress of air. My opinion is that in all existing systems of ventilation much power is lost through the stretching and breaking of the air, if I may so describe it. By this I mean that there is often practically very little air passing, when theoretically there seems to be a great deal. Take for example the class of machine used at Risca. Suppose it to contain 6000 cubic feet of space, and to make eight strokes per minute, theory would say that 48,000 cubic feet per minute were passing; but inasmuch as the exhaustion principle is that so well known in its application to the air-pump, I contend that before the pump has made 20 strokes the air would be so far rarefied that the power of the pump would be reduced much below its capacity.

By introducing the air as I propose on the supply system, I shall at least secure a complete change of air once in a given time (which can be regulated to meet the probable maximum requirements of the pits). My system, moreover, would force the gas into the coal instead of drawing it out as is done at present; this is most important. I would ask where do these sudden rushes of gas come from but the old workings? Has the miner ever met with a hole in the whole coal that would hold 10,000 feet of gas? Yet upon the present system of ventilation gas-holders are first formed to facilitate the accumulation of gas, and then this gas is pumped out to contaminate the workings, unintentionally, because the stoppings are believed effectually to cut off communication with all behind them. Upon my system, when an escape of gas is met with the lights would be removed, an additional length of pipe carried into the space, and the gas cleared out. I may remark that by the application of very slight pressure air may be made to pass through tubes such as I propose at 20 times greater speed than at open ways, and would continue when others failed; all not actually killed by the force of an explosion would at least be saved. For instance, had my system of ventilation been in use at Clay Cross, the men who divided the horse might now have been alive, as an ample quantity of air could have been supplied to them.

R. H. HUGHES.

Atlas Safety Gas-Fitting Works, Hatton-garden, Aug. 6.

ACCIDENTS IN COAL MINES—VENTILATION.

SIR,—On reading the Journal of July 27, I find you gave some passing comments on my invention for extracting fire-damp from coal mines as being impracticable. Being the patentee, I wish to make a few remarks as to the practicability and simplicity of my invention. Carburetted hydrogen gas is, as all are aware, lighter than atmospheric air, and if left undisturbed will find its way to the upper cavities of coal mines. Water and carbonic acid gas being heavier will take its place in the lower parts of a mine. If an owner of a mine were troubled with springs of water in his workings, he would spare no expense to remove them; he would either cut drains, or use pumps or syphons—in fact, he would bring all his scientific skill to bear on the subject. Fire-damp not being seen or felt (although equally dangerous) is not noticed, until a fearful accident places its horrors before him. I most respectfully beg to introduce my plan for extracting the fire-damp from coal mines, hoping that if any imperfections in its working details may appear they may meet with the attention of scientific gentlemen, so that the fearful destruction of human life may be averted. The plan I propose is, that in a mine where fire-damp accumulates a pipe or pipes should be introduced down the pit, and fixed along the sides of the road-ways to any large goaf, or cavity, where fire-damp may be, or which may be made a reservoir for the drainage of the mine. I then would fix a pipe, connected with the one in the road-way, to ascend into the highest part of the goaf, or cavity; next, I would exhaust the atmospheric air out of the pipes at the top of the pit, which when done the gas will flow in and through them to the top of the pit, as long as any gas is evolved in that part of the mine, and so on to the end of time (if no accident should take place to obstruct the current of gas)—in fact, gas may be as easily drained this way as water by a syphon. I feel so far confident that were my plan adopted a considerable saving would be effected in the present ineffectual system of ventilation, and I have no doubt that the safety-lamp may to a great measure be dispensed with, for I can prove that fire-damp can be easily removed from the mines at a trifling expense. J. G. WILLIAMS.

Blaenavon, Aug. 5.

VOLCANIC ACTION.

SIR,—I am sorry to find that Mr. Evan Hopkins has made an enquiry under this head in the Journal of June 22, without my having observed that the enquiry was addressed particularly to myself. I think there must be several examples of change of coal through the effect of volcanic heat to be at present seen *in situ* in English collieries, and I have no doubt but that the gentlemen in authority in those places would be glad to show Mr. Hopkins the *locus situs* of such examples. Should Mr. Hopkins come to Glasgow—and I shall certainly be very glad to meet with him—I think there will be difficulty in seeing good examples of coking coal from trap dykes in Dykehead Pit, near Glasgow; at Newton Pit, near Glasgow, and at the Old Pit, Dalzellowlie, Ayrshire. MARK FRYAR.

School of Mines, Glasgow, Aug. 5.

MINING AND MINERS IN SPAIN AND PORTUGAL.

SIR,—Having travelled hundreds of miles through these countries without knowing a single word of the language, or meeting with a person who could speak a word of English for days together, I had no alternative but to look with my eyes and exercise my brain. I was much surprised at the condition of these old maritime countries, that had been known as kingdoms for centuries (almost as long as time itself), having been conquered and governed by the Moors and Romans, and for many centuries by the present dynasty, and which for five centuries past have had all the riches of Peru and Mexico poured into them; and during the last century have passed through the great convulsion of the Peninsular wars, where mighty armies suffered reverses, and ultimately retreated. It is only within the last few years the ordinary common cart-road has been formed, the pack-horse, mule, or donkey being the only means of conveyance, taking all their loads in grass-bags on their backs. Of late the electric telegraph, the railroad, and ocean steamers have cast a shade of light on these forlorn lands, where a first move has been made in the right direction,—making common cart-roads to communicate with the principal towns, and one main line of railway through the country is commenced, little of which is yet complete. The common cart has wooden axles, on which the wheels are made fast, the journals being 6 in. diameter, running wood on wood. There is no wheelbarrow or shovel to be seen, except in the track of Englishmen. They have not a scythe in the country, but, as in Scripture, they gather their corn in heaps in the fields, and take in their cattle (either bullocks or mules) to tread it out. Grass they grow but little of, which they cut by sitting on the ground and with a knife cut two handfuls wide, the man shifting himself backward with each cut, and with this method twenty men cannot cut an acre in a week. The beam of the plough is made fast to a yoke connected with the two mules or bullocks; it has one handle only, and has neither coulter, grates, or mould-board, and can only just score the ground. Manure, like chimneys in their houses, is apparently unknown.

Could an Englishman for a moment suppose that in old countries like these, governed for centuries by a host of kings, enjoying the vast wealth of Peru, they could be in such a degraded state in the nineteenth century? I ask, what would be the feelings of Englishmen to see the corpse of either father, mother, brother, or sister placed within four boards filled with lime and dropped into a deep pit, with only a stone or log of wood to cover it, till another corpse is brought to be laid on it in a similar manner. When the pit is full a former pit is cleared out for the new corpse, and the decomposed mass is gathered in a heap and burnt; so this horrible system of interment continues progressively. More respect is there shown to the brute beasts; the donkey usually receives a decent kind of interment, being covered with clay, and never after disturbed. The law, too, wants much revision. A man is prohibited killing his own bullock, sheep, goat, or pig, even for his own use. The Government either sell or give the right of killing or eating two, three, or more butchers in every town, as may be required, who kill and dispose of all cattle as though it had been their own private property; so much so as a right to an estate of land is held in England.

I might mention a thousand things such as these, which is a great bar to the progress of the country, preventing exports, imports, and general advancement. For the present I only notice the passport and Customs system, which is a curse on the country. My passport cost me upwards of 30l. in money and loss of time; getting it handed over from time to time for booking at the offices of different steam-boat companies, without which they will not take you on board; this prevents many travelling through the country. To the Customs I do not so much complain, but from what I saw the revenue is not so much enriched by the system. The officers, who are in the interest of the Ministry for the time being, are those who make the money; they even ask for bribes. I knew them to be a dead end on shore, to prevent the vessel going to Vigo under quarantine, for the sum of 5l., they undertaking to swear he was living when brought on shore. The British Government, I think, might make their selections with more propriety, and appoint a British consul there who could speak English as well as Spanish, and not place the English traveller in the painful position of being introduced to one who could not speak a word of English; I had to get an interpreter before I could do any business with the consul I met.

I say there is a wide field open in these countries for the crowned heads to emerge from the darkest abyss in Christendom. Let them come out openly and declare liberty

and freedom to a long-injured people, who I believe to be open-hearted and generous, and who, I am sure, would shed their last drop of blood in supporting the crowned head that gave them freedom, and even raise a monument of fame, to hand down to the latest ages of posterity the noble and brave courage to emerge from such a benighted state. They would shine with redoubtable splendour, and silence at once all contention between opposite parties hunting for office. It would be better for either king or queen to emerge at once and give the people freedom, combined with such laws as would ensure them peace and comfort all their days, than to attempt holding them as serfs until they are driven to rebel; besides, the crown is risked by withholding the people's freedom. I know of no race ripening faster for their freedom than the people of these countries; and it is my sincere wish that good laws may be granted them, and that they settle down without shedding of blood.

Turning to the geological features of these countries, I can only say the mineral portion is all that can be desired. Every known mineralised rock, from the genuine tin granites upwards, is found to contain every ore that is known to man, even gold, I believe, is to be found in sufficient quantity to pay, if worked with good laws, good machinery, and engineering skill. As mining is at present conducted in these countries, it would take something enormous to pay. I saw tin as it was taken from the mine washed in a flat bowl, and not above a cart-load of stuff washed in a day, the rough tin only being caught, and not a shovel have they to use; this, too, in a professed working mine. I saw manganese and antimony shipped without washing. As a specimen of their management and appliances, I noticed at San Domingo Mine, where they raise and send from 40,000 to 50,000 tons of low-price copper and sulphur ore to England annually, that they have a supply that will be working for centuries, but they have no wheelbarrow or drawing-machine on the works beyond a common wheelbarrow. This mine is worked by an English company, and said to be paying good dividends. They have, I should say, two good English captains on this mine, but they by some means, either voluntarily or compulsorily, have complied with the directions of their manager, and fallen into the old Moorish system of working. What would Cornishmen say of working mines without a drawing-machine, wheelbarrow, shovel, skip, or kibble? For the shovel they substitute a turnip-hoe, and the barrow and kibble is replaced by a small grass-bag holding about 34 cwt. There is also the Tharais Mine, worked by a French company for copper and sulphur; the last portion (about 30,000 tons a year) is sent to England, the poorer portion they precipitate. There has been a great deal of money spent on these mines, which are also worked on the old system of grass-bag and turnip-hoe; but of late a change has taken place in their staff, and it is said they are now doing better. Lagunazo is also copper and sulphur. Here I had a good opportunity of investigating the old system of working, which they, too, have adopted in its integrity in this mine. I found they had cleared an add three-quarters of a mile long, with forty shafts on it, without a shovel, pick, kibble, or wheelbarrow; they had plenty of grass-bags, which the men used for night-caps at night. Here is engaged an English captain and a Spanish purser, with a horse and cart, and two guides with mules to wait on them; these latter well supplied with grass-bags for their purposes. They have also an under-captain, clerk, and storekeeper, whilst all the stores on the mine were not worth 10s. There is incurred an expense of 6000*l.* a year, exclusive of secretary or office expenses, postage, &c., in England, to keep eight men at work at a weekly cost of about 8*l.*, including materials.

I now ask the English mining public if they think they are a thousand years behind the old Moorish system of mining, or is the grass-bag and turnip-hoe an improvement on their system? And if so, send for your brother-Cornishmen to come home, and then adopt their system at once.

I visited one of Taylor's mines, and a German one, where the English system is adopted, and where the sight of a wheelbarrow, shovel, and pick made my countenance glow. I could not help shaking hands with them, and returned here with my hands blistered for the information. The readers of this paper will find some of these much-talked-of sulphur deposits, as said by reporters generally to be flat beds of sulphurous ores. I fear most reporters selected to go abroad are not practical men, but mere theorists, just capable of writing a glowing, flowery report, to suit the interest of the party having the mine to sell, and wishes to pocket a round sum of money. These would-be surveyors seldom take the pains to go underground; they take a look over the surface for an hour or two, enter in their memorandum-book what others tell them, and go again to where something better is to be found for supporting the inward man, something more agreeable to them than the barren hills of Spain. The majority of these men know nothing of the mines on their return to their native England.

I spent about a week examining these mines. I found them all worked on lodges running east and west, dipping slightly north, and varying from 20 to 200*l.* wide. They are embedded in a beautiful white-corded rock, running a little oblique to the lode. This resembles the white Cornish kyllas, so much sought after by the late Mr. J. Williams, of Scorrier House, Cornwall. These lodges carry on one side a large gossan, or rather capel, alongside a mass of soft gossan, almost a red marl; and where two capels meet by a slight variation in direction a large mass of sulphur is found, at the depth of about 10 to 20 yards. The gossan all unbottoms at once, hence the theorist comes to the conclusion that it is flat floors. These lodges are composed of a mass of dense, fine, laminated sulphur and bit, and are to be seen in the hand maps. But where it makes joints they are all filled with black soil, produced from the gossan fumes that come below. Where a breast of ground is laid open a black deposit is to be seen, as plain as the soot in a chimney from smoke. The sulphur when massive will not contain 1 per cent. of copper, where it is black jointed in places it contains 6 per cent. The Moors and Romans appear to have worked these mines in early days, and smelted the ores on the spot, where they have left millions of tons of slag as everlasting monuments of what they did; samples of this slag, which I brought home, produced more than the average of what can now be taken from the upper portions of the lodges. They sunk hundreds of shafts in the capel of the lodges only 2½*l.* over, apparently done with the hammer and pick, they sitting in the middle. Their shafts for drawing water are from 10 to 12*l.* over, and in no case have the more recent workers been as deep as the ancients.

I did not see the Rio Tinto Mine, but was informed that it was above 1000 fms. deep. The back of these lodges is known to be a mass of sulphur, and it is a well-known fact that great masses of sulphur do not continue in depth. Then I ask practical miners what they think will be the result of these mines in depth? I have already given my opinion in a former paper, that I believe these lodges in depth will be found to contain more quartz and copper, and far less sulphur; and I strongly recommend parties working them to prosecute them in depth, with good tools and machinery, vigour and economy, and they will be found to be lasting dividend-paying mines; but under the present system of bad tools, bad laws, and bad management, it must be something extraordinary to pay. I fear the late proprietors of these mines have been buying gold too dear. To carry out these mines they should send out men of intelligence, spirit, and perseverance; men who will rise in the morning and go to their work, and teach the natives how to use the proper tools. These men are to be taught; they are a kind and agreeable people. When travelling, and not understanding a word of their language, I often met them both kind and courteous. The Portuguese are the kindest people I ever met with, but I am sorry to say, I did not find Englishmen there, what I had expected. I saw agents and engineers lying in bed until eleven o'clock, instead of going to see if the mine were at work. I also found the underground miners far in advance of the generalty of the country. They were single, honest, and hardy, and had been many long days; they even drove hard-ground levels for less money than I have seen paid for levels in many badly managed mines in England.

The intricacy of the laws is the great drawback to opening lodges in these countries. If a person wants a sett or concession he is two or three years before he can get it, and under the bribery system he is not sure of getting it to the last moment; it is the man who pays the Government official the highest fee that gets it in the end. The concessions in Spain are by far too short. The Government of these countries, to encourage mining, should take the duty off iron, coal, and all materials, ores, &c., as in England; then mining would be sure to thrive.

There is often a great deal said to the people of the country being Catholics. They are, and certainly want a great deal of their time going to feasts; but in towns frequented by foreigners I found them no more bigoted to their religion than myself; and, as a specimen, I will repeat what one I met with said to me when travelling in the Mala pot. He spoke fair English; and when I touched him on his religion, he said he was a good Catholic. "In that case," I said, "you must take the Pope to live with you here in Spain." He said: "No; he should not come there to reside." I said: "He must either go there or to Ireland." He replied: "They had a place in store for him." I naturally asked him where, when he said: "The English are going to build a new Exhibition, and we Catholics propose to have a place set apart for him in the building, where he can sit at eight o'clock every Protestant ever Protestant and Catholic, and see him at a shilling each; and that more Protestants would go to see him than Catholics." He calculated what would be collected; and that sum he proposed should be invested in the English funds, the interest on which would be a good maintenance for him and all future Pops; they might then go where they pleased, in no way dependent on or beholden to any nation. A very good idea. He further said their country was never deficient for money to build cathedrals and churches, but they never had money to part with to make either a cart-road or railroad, or to carry out any public work. I think this is sufficient to show that the people of this country are not half so bigoted as the Irish; and I have no doubt they will become quite a reformed people in the next half-century. More when I return from my next tour, as I go out again in a week or two.

NICHOLAS ENSOR.

GREAT WHEEL ALFRED.

Sir,—By the report of the meeting of the adventurers, held in London on July 30, I perceive that the labour cost, merchants' bills, and salaries of agents for May, June, and July amount to the enormous sum of 5292*l.* 16*l.* 11*d.*, averaging 1766*l.* 5*s.* 7*d.* per month, and the merchants' bills being 1721*l.* 18*s.* for the same period. Now, how these sums have been expended I am unable to discover; and from the accounts being kept in London the Cornish shareholders are unable to see the cost-book, and thus point out any overcharges or discrepancies in the accounts. The committee of management are, no doubt, in their own estimation very clever men, and fully conversant with mining accounts, and the manner in which a mine 300 miles off ought to be conducted. I suppose also that they are fully capable of saying what levels, pitches, or stops ought to be worked, and what ought to be suspended; but I, as a large shareholder, have great doubts of the mining qualifications of this said committee.

Mr. James Hollow, of Lelant, appears, from your report of the proceedings, to have been the star of the meeting—the Demosthenes of the party. He, in the plenitude of his wisdom, had the report of the mine from Capt. Trelease all cut and dried for the occasion, and in whom he stated the Cornish shareholders had great confidence. Capt. Trelease may be a very clever man, but that he has the confidence of all the Cornish shareholders I deny; and I assert this without the fear of contradiction from any one, that he was a most improper person for the purpose, having been previously appointed by the lords to inspect the mine. No man can serve two masters. Why did not Mr. James Hollow get our old and valued agent, Capt. Thomas Richards, or Capt. Treddinick (of Great Work), or Capt. Pope (of Wheel Basset), to inspect the mine? Either of these agents would have given an impartial report; they could have no ulterior object in view. But, no; Mr. Hollow, for some reason which is now in embryo, took Capt. Trelease. It is quite clear that no man in his right senses would recommend extending the 142 east, where the lode is miserably poor and unkindly, when westward is our best knowledge that Great Wheel Alfred and Alfai Consols are also exceptions to all rules. Mr. Hollow is the purser of eight or nine mines; and from his experience in mining, I would ask him why he now wishes to stop this mine, when, with the present low price of tin and copper, we have at least 11,000*l.* worth of these minerals in reserve, most uncalled for, and most injurious to those shareholders who have borne the burden and heat of the day, and whose outlay, like mine, has been very considerable. I trust and hope that Mr. Hollow cannot afford to bear the expense of future prosecution let him relinquish his shares. And now for Mr. Hollow's deep interest in this mine. Who authorised him to put the adventurers to the expense of 9*l.* 3*s.* 6*d.* as a paid committee man for his "travelling expenses" to London, "attending the last general meeting"? Mr. Higgs, Jun., as an adventurer, charge the like amount? I myself attended a meeting on Jan. 20, 1860, and paid my own expenses. Economy, in my opinion, has not been strictly adhered to in the prosecution of this mine; and as I wish to open the eyes of the greatest number of the adventurers I write this letter. If some of the few who attended the last meeting are tired let them relinquish their shares, and give place to those who are desirous of working the mine legitimately, and not for jobbing purposes. Shareholders be alive to your own interest, and pause before you vote to stop this great mine.—*Penzance, Aug. 6.*

JAS. T. KEVERN.

[We insert this letter, as the writer states it to express the views of a number of shareholders, and as by its publication Mr. Hollow and others concerned will have an

opportunity of answering the statements made. We must state, however, that had Mr. Kevern attended the meeting, or even have read our report of the proceedings with sufficient care, he would have had a different impression of much of which he now complains.]

GREAT WHEEL ALFRED.

Sir,—Some months since there was a paragraph in the Journal, describing how a certain Scottish mining property, after having many thousands spent upon it by a private gentleman, was advised by the officials operating to give up further expenditure and relinquish the mine into their hands. But just as he was on the eve of doing so he had some visitors acquainted with mining property and mining men's practices. One of these gentlemen, after dinner, proposed a visit to the mine, and entering a level he took a pick and drove it into the side, when down came abundance of rich ore. This operation was repeated in each level with similar results. He discharged the officials he had until then engaged and employed a fresh staff of men, since which period he has realised an immense fortune from the mine, described as valueless by what are generally called the old men or ancients.

The shareholders of Great Wheel Alfred were in cash upwards of 70,000*l.*, and as much in ore brought forth in course of working, to drive levels, erect machinery, lay railways in the mine, and sink shafts. I say, then, to the shareholders, pause before you authorise a stoppage of the works, and give up the immense quantity of ore discovered into hands that have toiled not, and who have paid nothing for the development of its riches. The labourer is worthy of his hire; and why should not the patient shareholders in this property be repaid their outlay? A few weeks since an influential firm stated that the shares in Great Wheel Alfred were then well worth picking up; that 38,000*l.* worth of ore was discovered, and that the machinery was worth 12,000*l.* more, equal to 50,000*l.* in all. If the property is now stopped it will most probably go into other hands for a nominal sum; not more than 1*l.* or 30*s.* being eventually divisible amongst the proprietors, and that probably after many months, and perhaps never.

If the mine is to be stopped, let it be well and thoroughly examined first by a competent, conscientious, and thoroughly practical mining agent. Let the sides of the levels be bored, and the ends of the cross-cuts be perforated by borers as far as it is possible to perforate them, so as to see if bunches of ore are not immediately ahead, or within reach; and if such are discovered, why, may I enquire, should not the shareholders have the benefit of bringing the same into the market, and the results divided amongst them? According to one party, upon whom I place the greatest reliance, 40,000*l.* worth of ore is already in reserve, that is equal to 8*l.* per share, and other quantities may be brought to light in raising this to its present position for the market.

Mr. James Lane states that the mine is in a position to very greatly increase its returns of ore,—this he said in "Truth's Echoes." Our worthy Chairman was connected with a property in Spain (the New Linares), in which 50,000*l.* was expended within a very brief period, and the mine was represented by himself and colleagues as being worth 10 and 12 tons of silver-lead ore per fathom. And yet himself and colleagues agreed to stop this mine, for want of a few hundreds for some purpose, and divide the results of the sale of the machinery amongst the proprietors. Year after year has passed,—yes, seven years have passed,—but no division of assets has taken place, and not even a statement of accounts has been rendered to the proprietors, who generously advanced 60,000*l.* for the purpose of opening up the property in Spain, which was stated "could not fail within a very brief period to return handsome dividends."

Let Great Wheel Alfred be examined for the shareholders by private and independent agents, in the manner I have advised, and let not their property be transferred into the hands of strangers. But if the mine is to be wound-up after all, let it be so under the Joint-Stock Companies Act, and when assets are there are will not be retained for seven years, as in the New Linares case.—*August 5.*

JUSTITIA.

GREAT WHEEL ALFRED.

Sir,—I am a local adventurer in this mine, and have been such for some years past. Long before I embarked in any Cornish mine I recollect hearing a friend remark,—“If ever the Great Wheel Alfred goes to work again I should like to venture there; my father worked there, and has told me it will make a wonderfully rich mine.” This mine has been working for many years past, yet the latter prediction has not come to pass; how is it so? Is it the fault of the mine itself, or is it the fault of the way it has been worked? What said an experienced miner to one of the principal shareholders when asked for his opinion in the matter? He said,—“Place two pumping-engines, one on Falmouth shaft, and the other on Copper House shaft; let the latter work flat-roads in Painter's shaft, and let the former work flat-roads in the shaft (our eastern engine-shaft), by means you will four sumps going. Have the best possible means of drawing the stuff; and lastly, but principal of all, for without this you had better not work the mine at all, have an engine for raising and lowering the men. Carry this out with spirit, and you will be well repaid for your outlay.” Were his suggestions attended to? No. 1. Only one engine was erected, and a series of misfortunes occurred, for breakage took place, probably one thing and another being considered) costing the adventurers from that time to this not less than 20,000*l.*—2. That engine was not erected on Falmouth shaft; the latter being a shaft commenced by the former workers to work a bunch of ore believed by them some 40 or 50 fathoms below the bottom of that shaft, which the knocking of the mine alone obliged them to suspend. Their reason for supposing a large deposit of ore existed there is as follows:—About this spot shallow they had a good gossan back; below that they had a fine bunch of ore; below that they had another good gossan; and to get at the bunch of ore believed to exist below the latter they commenced Falmouth shaft, which they sunk, I think, some 130 or 140 fathoms.—3. Instead of having four sumps constantly working, and thus working a large mine on an extensive scale, they only had one occasionally going.—4. Instead of having the best possible means of drawing the stuff, they have one of the worst; for instead of cutting down, straightening, and making larger a small and crooked shaft, they have made it worse by cramping a double skip into it, which occasionally hitches in one another, when a breakage ensues; the skip then descends with great velocity, knocking everything in its way to pieces, and finally, probably, in the end destroying itself. The loss of time these breakages cause is, I am told on good authority, not less than one-third (four months out of the year). Next, the drawing-engine is placed some 200 fms. off from the shaft (a great contrast when compared with some of the best plans in the North of England, where the barrel is placed directly over the mouth of the shaft).—5. They have no engine for raising and lowering the men. Imagine the time daily occupied, say nothing of the fatigue the men endure, in descending perpendicularly, say, 1500*l.* (for this mine is at least 250 fms. from surface), and that they have then to do their day's work, and reserve sufficient strength to enable them to climb to surface again.

Now, I venture to say (taking the average of our coal mines) that were they to discard their means of raising and lowering their men (which with them occupies so few minutes for the same depth), and adopt the Cornish means, also the Cornish means for drawing their stuff, that they could not render their produce for double, treble, or quadruple their present price. The deeper and more extensive the mine is the greater concern it is to the adventurers themselves that these two latter subjects should be attended to. The miner will not live long, but do more work per day if you reduce the climbing up and down the mine. I here put it to the adventurers themselves in the strongest possible way—the *£ s. d.*—their own interests. For some time past this mine has produced more and more untimely, which has been sold to the bargain buyers, or at least the best of it, who carry it several miles to return it. Now, had this mine stamps we should, or ought to, have their profits; the expense of carriage, besides returning and making profit of that which at present is not worth carriage and returning charges, and is, therefore, useless to us. Attention to these things alone is sufficient to make the difference, in an extensive mine, between a profitable and a losing concern. I will say a few words with respect to a London committee, as in general it is little they know of mining, and frequently they are led by one individual. As a rule, if they knew that an end had been driven 30 fms. or more, and it had been poor, would they not counsel its being abandoned? Yet what did the late Mr. Boys (known as Purser Boys), no mean authority, say,—“Stop the poor ends, and stop the mine.”

Now, in saying what I have I wish to cast no reflection on any one; our losses are more to be ascribed to misfortune than to anything else. We have paid a large sum of money, but one-third of it has been spent in buying and fixing our machinery, and the breakages have probably cost us another one-third. We must also not forget that the late calls were made to pay that which should have been paid off years since. I doubt not, if we inquired into the matter, that these two latter subjects should be attended to could have been raised at considerably greater profit. Let us ask ourselves if we have not been wrong in only having one object in view of late—the running after a bunch of ore, which is running from us faster than we can follow it with any profit. I ask, should we not be more patient, and take it away with more comfort and profit to ourselves? I allude here to the excellent deposit of ore we have had west of Copper House shaft.

Let us remember, ere we knock our mine, that if we do so all the money we have spent is wasted to us. Let us remember that West Basset was knocked poor; that another party bought the mine for a few hundreds, and within a month or two a rich mine was found there. That Levant was knocked deep and poor; and that before the present 5 fms. of the mine was reached, the mine was rich. At Botalva, no doubt, as close as they on the point of stopping it, they only agreed to try it two months longer, when by accident they discovered the rich mine they had; they finding that actually they had driven their levels close alongside their rich lode, without seeing it. That Carn Brea Mine was stopped from poverty; that years after, when an experienced agent was invited to join in re-working it, he exclaimed he would as soon throw his money into the sea; and that when the present party had forked it they found it wretchedly poor, yet in a month or two they discovered that which led to the riches they have had and have now. Lastly, we must not forget Dolcoath, where the same results were found. But you may say that Dolcoath is an exception to all rules; this I admit, if you will acknowledge that Great Wheel Alfred and Alfai Consols are also exceptions to all rules. Who is there so presumptuous as to say the depth at which the riches of these two mines stop, or that the mineral below does not exceed by many times that which has been taken away? And if it is placed there, do you believe that, if we make use of proper means and skill, it will not repay us for our search? For if you do, I do not. The mine is in kyllas, as you know; and that we are not down to the granite, I doubt not, you are equally well aware. Who dare say the distance we have yet to attain to get the mine; and what the result will be when reached? Is it not better for us to sink the mine than to knock it? Is it not better to spend the money now laid out in the London establishment in the mine? Shall we profit by past errors, and work the mine, or not? Does not badly conducted work cost what well-conducted work does not? Do not let us be afraid of discovering a good bunch of ore, for our eastern neighbour deters us from working; that part of our sett which should have been worked years since, and which if worked, I am told, the lords will help us by giving up the dues entirely.

In conclusion, I may state I am no merchant or supplier, or to hold any official capacity in any mine. And thus you will see that unless the mine benefits each of the adventurers at a distance it cannot benefit me, reminding all that the time is short to determine the question of all importance—whether the mine shall be abandoned or not.

Penzance, Aug. 5.

A LOCAL SHAREHOLDER.

GREAT RETALLACK.

Sir,—The public generally pretty well understand the object of such communications as that of your anonymous correspondent in last week's Journal respecting this mine. His misrepresentations, however, must not be passed by unnoticed, and I will thank you to allow me a space in your next impression for this reply. It is not true that in a few fathoms sinking the shaft will be entirely out of the sett; nor is it correct that the 35 is only 8 fms. from the boundary. In reference to the former, it is being sunk on the course of the big lode, which underlies south, and at its present underlie there is no probability that even the south part of it will be out of our sett in this part of the mine at a depth of 100 fms.; the lode varies from 10 to upwards of 30 fms. in width, so that if it continues this size in going down, the north part will be in our sett deeper than 120 fms. from surface, and if the lode yields much lead in depth, the north side will be the most likely place to find it.

The writer of the letter in question tells us that it is stated that the shaft in which we had the improvement will be entirely out of our sett in a few fathoms sinking; but why did he not tell us something about the improvement itself? Has he not also heard that the part presenting such good indications for lead comes into the shaft from the south, and that so far as has yet been seen of it it is about perpendicular, if not actually underlying north into the very heart of our sett? Has he not heard that some have supposed it to be altogether a distinct lode? Why single out this bit of rumour, got up by interested parties? It may not suit his books to tell the whole truth, but the adventurers will have learnt from the reports that although we have not sufficiently opened on the new discovery to say much about it, yet enough has been seen to sa-

tisfy us that our prospects for lead in depth are greatly improved. As to the 35, we have yet towards 20 fathoms to the boundary, and many hundreds of tons of blende are already laid open, which will be taken away at about 6*s.* per ton, as soon as the price of spelter advances. The western end is also laying open the big lode, and we calculate that this level 150 fms. on the course of the lode. This is not a long run on the lode; but every one knows that the value of a sett depends not on the extent on the course of the lode, but in including within its limits that part where the deposits of ore are formed; and in our richest mines the ores are generally extracted from a comparatively small extent of ground. We have good blende ground for more than 70 fms. long, and a course of lead half of this length, and the width of the deposits of blende would make this a very rich mine.

W. H. REYNOLDS.

West End, Redruth, Aug. 7.

GREAT RETALLACK—DUCHY AND PERU.

The following letter has been addressed to Messrs. Watson and Cusell:—
GENTLEMEN,—I observe in the Mining Journal of Saturday a communication from a correspondent, under the signature of "Duchy and Peru," making some remarks as to the nearness of the workings in Great Retallack to the Duchy and Peru boundaries. I think it only justice to my co-partners, fellow-agents, and myself, to disclaim all knowledge of such a communication till it appeared in the columns of the Journal.

I am, gentlemen, your obedient servant,
St. Annes, Aug. 5. THOS. BLESSEKOFF, Purser of Duchy and Peru.

LEAD MINES.

Sir,—Lead ore within the last few months has dropped from 30 to 25 per cent. in value, and some lead mines have fallen just in the same proportion. Now, it is wise for any shareholder in lead mines to sell at the present time? Undoubtedly not; but, on the contrary, he should buy from those who are weak enough to sell. Supposing the dividends for three or four months are a trifle less than usual, is that any reason why he should sacrifice twenty times as much by the sale of his shares? To show the folly of such a proceeding, I will instance the finest lead mine in Cornwall—Himmscroft—the shares in which a short time since were selling at 41*l.*, and they are now quoted at 34*l.*, but whether there are any sellers or not is another question. Now, the mine, I am told, is as good as ever, and the quantity of silver in the last lot of ore sold was just 2*ozs.* to the ton less than the former lot (a variation which, I presume, is continually taking place, and even to a much greater amount in most mines). Well, let us suppose that the dividend is reduced to 35*s.*, or even 30*s.*, instead of 40*s.*; here will be a falling off of 5*s.* or 10*s.* on a share, and yet if a share is sold no less than 7*l.* will have to be sacrificed. I am supposing that a less dividend than the last one will be paid, but I have no right to suppose any such thing, as I presume an extra quantity of ore could be raised if thought desirable, to make up for the loss by the fall of lead ore; I hope, however, such will not be the case, unless ore goes to its old price, and, for my part, will be quite willing to receive a less dividend until the price of ore is higher; indeed, whilst ore is so low, and smelters are so unwilling to buy, unless at such a very reduced price, I think the less ore raised the better. I hope Capt. Trevillion will send a report to the Journal, to satisfy shareholders that the fall in the price of the shares is not owing to any falling off in the mine, but entirely to the drop in the price of lead ore.

Now, let us look at WHEAL LUDCOTT. This mine is in great demand about six weeks since, the shares selling freely at 3*l.* 12*s.* 6*d.*, but the moment the usual dividend of 4*s.* was declared, down the shares went 10*s.* or 15*s.*, and they are now to be had at about 2*l.* 10*s.* The reason of the fall was supposed to be owing to the dividend amounting to 200*l.* more than there was actually earned, notwithstanding every satisfactory explanation in the report was given of the cause of the deficiency in the profits—accidents in the mine, which threw them back several weeks, besides adding greatly to the expense. Now, I am informed that the mine is looking as well, if not better, than it ever has, and that, notwithstanding the low price of lead, the usual 4*s.* dividend can be continued. I trust Capt. Knapp will favour us with a report of the mine, when I have no doubt the panic will be stopped. What I have said of Herodsfoot and Ludcott will apply to other lead mines, and, indeed, to zinc, copper, and tin mines; and my advice to parties who have money to spare is to lose no time in buying in either lead, zinc, copper, or tin mines, as the moment affairs are settled in America they will reach their old rates, and the prices of minerals will rapidly advance. To those who already hold shares in dividend mines I would say, do not part with one of them, as the decrease in the amount of dividends will be but temporary, probably only for two or three months. Many will use every endeavour to frighten people into selling their shares at this time, by trying to make them believe the mines are looking worse; but let them not be believed too quickly, at all events not before some respectable mining captain has been consulted. For lead mines select those captains who have been used to lead mines, and the same with respect to copper and tin mines. A SPECULATOR IN LEAD MINES.

Meetings of Mining Companies.

NORTH PROVIDENCE MINING COMPANY.

An ordinary general meeting of proprietors was held at the company's offices, Gresham-house, on August 3. Mr. J. A. MORGAN, F.G.S., in the chair.

Mr. T. SPARGO (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

The CHAIRMAN said, as he had upon a previous occasion fully stated his opinion of the prospects of the undertaking, the result of his personal inspection, he need upon the present occasion but briefly advert thereto. There was some satisfaction in finding that the opinion he had formed and expressed had so far been attested by results certainly not less satisfactory than had been hoped. Not only had they an exceedingly well-defined lode in the adit level, the character of which appeared to improve as the explorations were extended, but there were several other lodges running east and west intersecting the entire sett, and each of them presenting indications more or less favourable for the production of copper. Indeed, he still entertained the unequivocal opinion, which was supported by several eminent practical authorities, that North Providence was intersected by the same run of lodges as those that had produced such enormous riches in the adjoining mines of St. Ives Consols and Wheal Trenchard. He reiterated his conviction that, by ample, but judicious, development North Providence would prove itself to be equal to its dividend-paying neighbours. The general characteristics of the property, the indications presented at every point of operation, and its position, justified the hope that success would be assured if the mine were energetically explored. He was glad to be received by those present that Capt. James Pope no mean authority—had stated "that the sett was traversed by several lodges of great promise." Capt. Pope had further stated "that the ground was traversed by several cross-courses and elvans, about which most of the mines in Cornwall make rich deposits of copper and tin, the stratum being a beautiful clay-slate, highly mineralised; also being very near the granite range its position cannot be surpassed, and I feel confident if properly explored will make a profitable and lasting mine." If, therefore, indications were any criterion of success, North Providence must, upon proper development, become one of the established properties of this favoured district. But, notwithstanding the increasingly favourable features which their enterprise continued to present, he regretted to state that they had encountered difficulties, not the least of which was the tardiness—in fact, he might say, the utter unwillingness—of a certain proportion of the shareholders to furnish the necessary capital for the prosecution of the development of the property. To that cause, and that alone, might with fairness be attributed the somewhat unfortunate position in which the company was at present placed. Having made those remarks, he would proceed to advert to the object for which the present meeting had been convened—the present position of the company's affairs. He was sorry to inform the meeting that in consequence of the many pressing claims on the part of creditors against the company, it had become absolutely necessary to come to some determination with regard to the sale of the property. That was the course to which he was reluctantly compelled to resort, and he was glad to be received by those present that Capt. James Pope no mean authority—had stated "that the sett was traversed by several lodges of great promise." Capt. 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Providence would be in a position not only to pay its costs, but excellent dividends. —Capt. DALE, in answer to a question, said that he believed the "trap rock" would be found to hold but a few fathoms deeper. There was a similar hard bar of ground in each of the neighbouring mines.

The CHAIRMAN said he had some splendid specimens of ore in his office, which he should be glad to show to any parties connected with the undertaking.

After some further discussion, upon the proposition of Mr. MILSTED, seconded by Mr. JAMES, it was unanimously resolved "that this company be dissolved forthwith. Mr. Thomas Spargo, the purchaser of the company, and is hereby, appointed liquidator to wind-up the affairs of the company, and to dispose of its property and effects, either by public auction or private contract, and either to individuals or to a public company, and either for cash or shares in any such company, and to distribute the proceeds, after payment of all just debts, *pro rata* amongst the shareholders."

It was also resolved that in all cases where legal proceedings have been adopted against any of the shareholders, or shall hereafter be commenced, or on any other legal matter connected with the winding-up of the company, Mr. Spargo be, and is hereby, authorised to consult Mr. Morgan as solicitor.

A vote of thanks to the Chairman terminated the proceedings.

CENTRAL MINERA MINING COMPANY.

An ordinary general meeting of proprietors was held at the London Tavern, on Tuesday, Mr. R. J. BUTLER in the chair.

Mr. HIGGINS (the secretary) read the notice convening the meeting, and submitted a statement of accounts, made up to July 31, which showed a credit balance of 10s., against which there was an amount due to bankers of 12s. 12s. 9d.

The report of the agent was read, as follows:—
Aug. 3.—The shaft sinking for the Red vein is going down with all possible speed, taking into consideration the hardness of the ground: we are now at a depth of 23 yards, and I would advise to sink to the 35 yards before putting out to intersect the vein, which if it proves rich will give us good backs for stopping away. The cross-cut driving north to intersect the lode in the 35, east of Edgworth's shaft, is going on as fast as possible, and we expect to cut the lode in a few yards more driving, which after intersected and driven upon a few yards we shall be able to put down a winze to ventilate the 35, as that part of the mine has not been worked from the 55 to surface. The stope in the back of the 35, east of Edgworth's shaft, is much the same as last reported, worth 18 cwt. to the fathom, but the air is rather bad, and makes it difficult for working; we may expect a further improvement when we get the 35 over this end and get it ventilated. No. 2 cross-cut driving north to intersect the branch passing through No. 1 cross-cut is very hard for driving, and unproductive for ore; we expect to cut the branch in about 2 yards more driving. The branch driven on out of No. 1 cross-cut is looking very promising, with some small spots of ore, but not enough to set a value on. The dressing operations are going on as well as can be expected; we have from 5 to 6 tons ready for sampling, and expect to make it 11 tons by the end of the present month.—W. DAVIES.

The CHAIRMAN stated that he regretted the company's Chairman (Mr. Edgworth) was unable, from indisposition, to attend the present meeting, but he was glad to state that a communication had been received from him, which was to the effect that the shareholders were aware of the attention of the directors was principally devoted to the development of the vein below the 55 yard level, and that the prosecution of the work below that level was much impeded by an accumulation of water. In order to get rid of this, the directors made many enquiries for a steam-engine of sufficient power both to pump it up as well as to raise the ore. They met with one at a moderate price, but unfortunately it was found that the diameter of the largest of the existing shafts would not admit of the requisite pumps and other apparatus being put down. They resolved, therefore, to sink a new shaft in a situation whence the veins in the eastern part of the set, and where it had always been believed that valuable deposits of ore would be found, could be approached, and whence also a considerable amount of drainage could be effected by access to the long cross-cut driven by the former occupants of the mine. This new shaft had been made of sufficient diameter to admit of pumping and winding machinery, and it had been already sunk to the depth of nearly 23 yards without meeting with water in sufficient quantity to impede the mine. At the same time, the vein in and above the 55 yard level was being worked upon, and a tolerable quantity of ore had been obtained from it. The shareholders would remember that a shaft was sunk to the 23 yard level in the eastern part of the set, but, a bed of shale having been met with, the sinking was stopped. The directors had not recommended that shaft—not from an opinion of its inutility, but because they thought it not advisable in the present state of the company's finances to expend money in too many points at the same time. They confidently expect that before they make a report to the shareholders, at the end of next quarter, the new shaft will have been sunk to a sufficient depth to enable them to drive out to the east to meet the veins on that side of the set, and which had proved so rich in the adjoining mines. Having stated that he would be glad to afford any information which shareholders might desire, he concluded by moving the adoption of the report and accounts.

A discussion ensued as to the course to be adopted with regard to the future working of the mine, the unanimous wish being that it should be prosecuted with the utmost vigour, that the best opinions should be obtained, and that one consistent plan of operations should be carried out. The prospects of the mine were considered to be of a very encouraging character.

Mr. CHURCH wished to know what such heavy law costs (70l. odd) were for?—The CHAIRMAN said, it appeared that the greater part was in consequence of an action for libel against some of the individual promoters, but which the company had nothing to do with.

Mr. MURCHISON: certainly, the company was neither plaintiff nor defendant in the case alluded to, and he understood had never authorised any proceedings in the case. It was, he believed, entirely a personal matter.

Mr. BATTERS was of opinion that the company should not have an official legal adviser, for then probably their law costs would not form so serious an item as had hitherto been the case.

Mr. PHILLIPS suggested that the mine should be inspected by Messrs. Taylor and Sons, and that the directors be requested to adopt whatever recommendations they set forth.

Mr. MURCHISON thought it very desirable to get the mine inspected by Mr. John Taylor, and hoped he would undertake it. If not, he advised that Mr. Taylor should be asked to recommend some one. In case Mr. Taylor declined to attend to it at all, then he thought Messrs. Phillips and Darlington, who were good authorities on mines of this character, should be applied to.

Mr. BATTERS stated that the opinion in the immediate neighbourhood of the mine with respect to the new shaft now being sunk on the Red vein—at present being so probably worked in the Miners district—was of a favourable character. There were many other points of interest in the mine, which at the present time were receiving but little attention. He was clearly of opinion that no fair value of the set could be formed from the contracted scale of operations which the company had hitherto carried on.

The CHAIRMAN having undertaken the duty of seeing the Messrs. Taylor, and obtaining their report and opinions with respect to the future working of the mine.

The report was received and adopted, when it was unanimously agreed that the accounts should be referred to three shareholders for examination, and that in the meantime the charge for law costs should not be acknowledged.

A resolution was then passed empowering five shareholders to constitute a general meeting, ten having been the number hitherto required. It was also resolved that all general meetings of the company shall henceforth be held in London.

At the previous quarterly meeting of shareholders a resolution was passed increasing the number of directors. Upon the re-opening of the question, it was found the appointments were informal. The matter was deferred for further consideration.

A vote of thanks to the Chairman was passed, when the proceedings terminated.

RIVER TAMAR COPPER MINING COMPANY.

The fourth annual general meeting of proprietors was held at the company's offices, King's Arms-yard, on Wednesday.—Mr. A. SMEE, F.R.S., in the chair.

The accounts, made up to the end of July, showed a cash balance in hand of 380l. 2s. 5d.

The CHAIRMAN, in moving the adoption of the report and accounts, stated that the mining operations had been exclusively confined to the extension of the adit level, for the reason that in the shaft there existed a hard bar of ground, which it might take some time to sink through. Experience showed that when these hard bars of ground were gone through, the production of ore would be increased, and the mine would be able to give extensive deposits of mineral might be discovered. Another reason for having confined their operations to the adit level was that it would sooner or later intersect, at a depth of 60 fms. from the surface, all the lodes which the set contained. During the past twelve months they had intersected the place where the lode was expected to have been reached, but it had not yet been found. The board had for some months been anxiously looking for that lode, but as yet only some small veins of copper had been met with, showing that the whole ground was mineralised, and congenial for the production of copper. Beyond their southern boundary some good discoveries had been made, in a channel of ground of great value. It was already producing large quantities of copper, rendering it highly remunerative. Singularly enough, some time ago, when the present company was in course of formation, he (the Chairman) was very anxious to have that piece of ground added to their set, thinking that by increasing its size it would be the speedier brought into a remunerative condition. Negotiations were entered into with the parties, but nothing definitive was arranged. If they had succeeded they would now have been a dividend-paying mine. Although the directors were unanimous in their recommendation to confine operations to the driving of the adit level, their pursuer at Tavistock appeared to be of quite a different opinion, for in a letter which the board had received he recommended sinking the engine-shaft, in order to see the lode at a greater depth. His (the Chairman's) opinion was that below the hard bar of ground at the shaft the lode might be found of a very different appearance; but each of the directors would be decidedly opposed to resuming the sinking of the engine-shaft with the limited means at present at their command. By carrying on the investigation at the adit level they might at any moment, between the present point of operations and the southern boundary, intersect some remunerative deposits, as several lodes were known to exist. Whether those lodes should prove to be remunerative or not, there was one thing quite certain—that there were several lodes between the present point of operations and the southern boundary. Considering the highly metalliferous character of the ground, and that large quantities of copper had been obtained in the immediate vicinity, there was the greatest probability that some of those lodes would prove remunerative. As regards the finances, he might state that the directors hesitated to make the remaining call of 2s. 6d. per share until they had taken the sense of the shareholders at the present general meeting, but the directors were decidedly of opinion that it would be advisable to continue the adit level to the utmost of their means. If that course were not adopted, the only alternative would be to sell the property, which, he feared at the present time would not fetch anything like its value. So confident was he in the hope of discovering something of importance in the adit level, that if the present company should hereafter determine to abandon the set, he would willingly be one of a party to furnish capital sufficient to cross-cut up to the southern boundary, for he felt confident that before reaching that point a remunerative lode would be discovered. He might mention that he had been informed by the Duchy authorities that unless the works were prosecuted with greater vigour they would not hold out any inducement of the dues being remitted. Now, the directors felt, with the limited means at their command, that a more vigorous prosecution of the works might benefit the Duchy of Cornwall, but not the pockets of shareholders. The directors, therefore, strongly recommended that the one course should be adopted—to continue the prosecution of the adit level to the extent of their means, which would enable them to drive 40 fms., and during which something of importance might be discovered. He concluded by moving the adoption of the report and accounts.

Mr. BAKER seconded the proposition.

The CHAIRMAN, in answer to an enquiry, stated their liabilities did not exceed 100l.

A SHAREHOLDER suggested that steps should be taken to wind-up the company. They were in a solvent condition, and the sooner that course was adopted the better.

The CHAIRMAN said it would be necessary to call a special meeting, to consider the propriety of adopting such a course as that proposed by the hon. proprietor. In answer to a question, he (the Chairman) stated that the captain valued the plant at about 1000l.

Mr. DELAMERE thought it would be advisable to make the remaining call of 2s. 6d. per share, the directors giving an assurance that no liabilities should be incurred so as to make after-calls upon the shareholders.

The CHAIRMAN said it being a limited company, after-calls were impossible. The 2s. 6d. per share would furnish sufficient capital to prosecute their works for 12 months.

If during that period a remunerative lode were discovered, it would be worth their while to sink the engine-shaft, if it could be paid for out of proceeds.

Mr. LEVY suggested that the mine should be inspected by Capt. Vivian, and that his report be inserted in the Mining Journal.

The CHAIRMAN said his confidence in the undertaking had in no way diminished. In the same description of granite, the neighbouring mines of Old Gunns Lake, Devon Great Consols, and Bedford United, enormous profits had been made; and as they in River Tamar were approaching the junction of the granite and killas, it was by no means improbable that some similar satisfactory results might be anticipated.

The report and accounts having been unanimously adopted, the retiring directors and auditors were re-elected. A vote of thanks to the Chairman and directors was passed, when the proceedings terminated.

WHEEL UNITY MINING COMPANY.

An ordinary general meeting of proprietors was held at the company's offices, George-yard, Lombard-street, on Thursday.—Mr. J. Y. WATSON, F.R.S., in the chair.

Mr. J. WATSON (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed—

Calls received.....	£910 6 8
Old sold, April.....	230 19 1
" June.....	457 1 7 = £1598 7 4
Balance last audit.....	£173 0 6
Mine cost, April.....	255 3 2
" May.....	309 18 8
" June.....	296 2 6
Merchants' bills.....	472 14 9
Dues.....	10 5 3
Sundries.....	6 16 6 = 1523 1 4
Leaving credit balance.....	£ 75 6 0

Balance of liabilities over assets, 923l. 18s. 1d., exclusive of the sale of ore on Thursday, which realised 450l., thus reducing the liabilities to 473l.

The report of the agent was read, as follows:—

Aug. 7.—The flat-roof shaft is nearly down to the 85, and in three weeks we shall cut a flat at that level, and commence driving on the lode. Owing to the change in the underlie the lode for the last 6 feet sinking is standing a little north of the shaft. The 75 cross-cut north is driven about 6 fathoms through a hard elvan, rendering our progress slow. The ground is now much improved, and as the elvan cannot be far off, and we are pushing on the end with eight men, we hope shortly to cut the lode. In this cross-cut we have small branches of speck and muddle, and the joints of the elvan are strongly tinged with copper. Looking at the intersection of this lode by the elvan and large cross-course, together with the favourable indications presented in the cross-cut, and the circumstance of having a bunch of ore east of the cross-course, we look forward with confidence to intersecting a good lode of copper ore. No level has been driven on this side west of cross-course below the adit, which is only 7 fms. deep, and from which they returned large quantities of tin, and where the lode presented good indications for copper in depth. The 75, east of flat-roof shaft, is extended nearly 35 fms., through a moderately productive lode. In the end the lode is 9 inches wide, presenting good indications for copper. The stope in the back of this level is worth about 8l. per fathom. In the 65, east of flat-roof shaft, the lode is 18 inches wide, made up of flookan, spar, peach, muddle, and stones of copper ore. The stope in the back of this level, west of the shaft, are worth 20l. per fathom for the length of stope. In the 55, east of engine-shaft, we have had an improvement for the last few days, the lode now yielding stipes of rich quality ore. In the shallow levels over this we rose a few tons of copper ore, and hope this may prove a continuation of the same bunch of ore. In the 50, west of flat-roof shaft, the lode is yielding good quality ore, and the same may be said of the 40 fm. fathom. On the south lode we are driving the adit level, and cross-cutting it from the new south shaft; in the adit and at the surface it is of a promising character. We are working 50 persons on the lode. The average price paid for driving on the lode is 45s. per fathom, and for stopping 37s. 6d. per fathom.—P.S. We shall sell on Thursday next about 55 tons of copper ore, which, according to our essays, ought to realise upwards of 4000l.—A. H. REYNOLDS, AGENT.

The CHAIRMAN said there was now a very good prospect of cutting the lode rich in the 75, which might throw a great light upon the intrinsic value of the property.

Mr. HALSE said his impression was that the appearance and prospects of the mine were never so encouraging as at the present time.

The SECRETARY, in answer to enquiries, stated that since last meeting they had sampled 124 tons of ore. Their old samplings averaged about 3 to 4 per cent. produce, but their present samplings averaged from 7 to 8 per cent.—the last, indeed, produced an average of 9½, so that the ore had become more than double its original value.

Mr. HALSE considered it to be highly satisfactory that not only was the ore increasing in value, but that it was also materially increasing in quantity.

The report and accounts were adopted.

Mr. HALSE proposed that a call of 2s. per share should be made, for that would bring in sufficient to disburse their liabilities.

The CHAIRMAN thought a 2s. call was insufficient. He reminded the shareholders that if the meeting had been deferred for two or three days the accounts would have gone out 456l. the better.

Mr. WILSON thought that it was better upon all occasions to make a call to meet all their requirements, for if it had no other benefit it improved the market value of the shares.

The CHAIRMAN said the mine had never had any support from the market, and fortunately it never required it, so that what effect was produced upon the market value of the shares was of very little consequence. If, however, the lode in the 75 proved to be what the indications justified them in expecting, but few more calls would be required.

Mr. POWELL thought there could be no doubt the prospects of the mine were gradually improving, and it was by no means an unsatisfactory fact to know that shares were being purchased by persons residing in the locality of the mine.

After some further discussion, a call of 2s. 6d. per share was made.

The consideration of the question of dealing with the forfeited shares having been deferred, a vote of thanks to the Chairman was passed, when the proceedings terminated.

TINCROFT MINING COMPANY.

A special general meeting of shareholders was held at the company's office, Winchester-street, on Thursday. Mr. JOHN G. TRICE in the chair.

The notice convening the meeting having been read,

The CHAIRMAN submitted the following statement from the directors:—

The directors have convened this special meeting to consider the recommendations made to them by the last annual general meeting of shareholders and the proprietary, and the expediency of placing the company hereafter upon the Cost-book System. These recommendations have had the anxious consideration of the board, and your directors have been advised that they could not be carried out without a change in the mode of administering the company's affairs, as prescribed by the original terms and regulations for the management of the company, amounting to a change of constitution. The necessity for such a change has, no doubt, been many times pressed upon the attention of the shareholders by various circumstances, and the somewhat anomalous position of the company as a scrip company seems scarcely in conformity with modern legislation. The board have been advised that the recommendations of the shareholders' meeting could be carried out by placing the company upon the Cost-book System, as known and practised within the Stannaries of Cornwall, in which your mine is situated. It would thus, amongst other very important considerations, be assimilated to the other undertakings in that district, placed under the protection of known principles of law, and have the advantage of the special Court for the affairs of mines within the Stannaries. Your directors do not desire to take any active part in your discussions, they would prefer to submit the matter for the consideration of the meeting without any authoritative recommendation from them, and will only vote and take part in the proceedings as simple shareholders. It was recommended to the meeting that they should appear as simple shareholders and the common benefit of the property. The solicitor of the company will be present at your meeting, and can afford explanation on any legal points as to which you may wish his opinion.

The CHAIRMAN said the directors, as such, would not take any part in the discussion. It was for shareholders to express their dissent from or assent to the question.

Mr. BOYLE imagined the step now proposed to be taken had arisen from the recommendations placed before the directors at the last annual meeting.

Mr. J. FIELD (a director) explained that those gentlemen present at the last meeting would recollect that he, as Chairman of that meeting, objected to put certain recommendations as resolutions, because he considered it was not competent for the meeting to pass them. He, however, thought, and so expressed himself, that there could be no objection to accept them as recommendations. When they came to consult their solicitor, it appeared that the way in which those recommendations could be carried out was by altering the constitution of the company, and placing it under the Cost-book System. It would be presumption on his part to infer that Mr. Childs (the solicitor) was not legally correct, but he (Mr. Field) could not help thinking that the directors could meet shareholders often than once a year without making themselves a cost-book company.

At the request of several scripholders the recommendations referred to were read. They were to the effect that the directors of the company should be elected by the general body of the shareholders at their annual general meeting, half to retire from office every year, but to be eligible for re-election; the directors were requested to advise with their solicitor as to the manner in which that change in the constitution of the company could be effected. It was recommended that the general meeting be held every four months.

Mr. BOYLE enquired if they were to understand that the directors considered the best mode of carrying out these recommendations was by changing the constitution of the company into the Cornish method known as the Cost-book System?

Mr. R. W. CHILDS (the company's solicitor) said he had undertaken somewhat unwillingly to advise upon the matter, inasmuch as it involved great anxiety and considerable perplexity. The present Tincroft Company was one of the few remaining scrip companies which were not now recognised by any existing Act of Parliament having reference to joint-stock companies. They were recognised to a certain extent, for the shareholders holding the scrip were liable as shareholders, but scrip companies were not recognised in the Act affecting joint-stock companies or those in Cornwall. Therefore, he had ventured to advise that the position of the Tincroft Company was somewhat anomalous under modern legislation—it was not a company under a Deed of Settlement, by which its proceedings could be governed, the only document at all regulating it being the rules and regulations endorsed upon the scrip of the company. He was not present at the last meeting of shareholders, but as soon as those recommendations were passed the directors begged that he would carefully consider how far they could be carried out. Now, it was clear that if any meetings were held other than those prescribed by the rules endorsed upon the scrip certificates the regulations would not be adhered to, and the transactions at such meetings would be void, and not binding upon the shareholders. The other recommendation was still more important, because it dealt with the constitution of the governing body of the company; it, therefore, involved a special and total change in the constitution of the company. He advised the directors that there is no power to pass a bye-law by which such a fundamental change could be made in the constitution of the company. No form of association for mining companies was known but that of limited liability and unlimited liability, and, therefore, if the mine was not in Cornwall, any change must be in that direction. The Tincroft Mine, being situated in Cornwall, the courses open were either to place the company under the limited or unlimited Acts, or under that known as the Cost-book System. His advice was that, for the interest of the shareholders, it would be better to adopt that which was the present form of scrip company in Cornwall, the Cost-book System. If the meeting pressed those recommendations the better course would be to convene a special meeting to take the opinion of the shareholders upon the question. If, however, the shareholders were divided in their opinions, his advice to the board would be that the matter drop, for he would not advise them to adopt any step which might involve them in litigation; but if there were only two or three objectants holding a small interest, that would not prevent the remainder putting themselves in a legal position, for the Court would say "Your opposition is factious, and as it is not for the general good of the company we shall not recognise it."

Mr. J. FIELD (a director) submitted that he did not think any change was necessary,

but at the same time he did not oppose nor support the question before the meeting. He did not think the proposed change necessary, although it might be expedient.

Mr. BOYLE wished to know what benefit the shareholders would derive from the change?—Mr. CHILDS said at present the scripholders had no power over the directors, nor over the affairs of the company; and to give them the control which they appeared to think would be desirable could only be effected by an alteration in the constitution of the company.

Mr. GOATLEY, in answer to a question from Mr. Birdsey, stated that the present lease had eight or nine years to run.

Mr. F. FAYON could not imagine that the question now before the meeting had arisen from the recommendations placed before the directors at the last annual meeting. Those recommendations, which met with a unanimous approval, merely expressed the wishes of the shareholders as to the way in which the company should be conducted, urging the especial desirability of the company's books being at all times open to the inspection of shareholders. It was well enough to talk about majorities controlling minorities, but it was well known that power was often exercised prejudicially to the interests of the company. As far as he was individually concerned, although it was well known that he was a strong advocate for the Cost-book System, he did not think in the present instance the company's position would be improved by the adoption of the course proposed, for if no other reason than that it might result in the displacement of those who had controlled their affairs for so long a period, and in whom the most implicit confidence was placed.

Mr. BOYLE thought it would have given greater force to the suggestions, and the shareholders would have been more inclined to have entertained them, if they felt the directors were unanimous in the recommendations; but after hearing one of their directors say that he was altogether indifferent about the matter, upon the ground that he could not see what benefit would accrue, it almost shook one's confidence in supporting the proposed change. He would like to know whether the question had been canvassed at the board?

The CHAIRMAN could not say that the matter had been discussed by the board. He reminded the meeting that at present the board had very great authority, and that the shareholders should be possessed of that authority, he, as a shareholder, was in favour of the proposed change.

Mr. FIELD said, so long as they continued their present system of paying dividends out of profits, and carrying over a balance of undivided profits of between 4000l. and 5000l.,—he could not imagine they were likely to have any legal dangers threatening them. Remembering that for so long a period the affairs of the company had, under the present regime, been satisfactorily managed, he must confess that he looked upon a change with some degree of distrust.

The CHAIRMAN said the object of the present meeting was to take the feeling of the proprietors upon the proposed change. The directors at the present time had power to deal with the property as they thought fit, and the scripholders had power to express their sentiments but once in twelve months. Now, it was his desire that the company should be represented by the shareholders at large—that was his opinion as a shareholder.

Mr. R. W. CHILDS submitted that if a single shareholder positively objected to the proposed change his advice would be to lay the matter aside.

Mr. JOHN YOUNG (a director) thought if they could meet the shareholders four-monthly, every purpose would be answered.

Mr. CHILDS emphatically stated that the board had no power to carry out such a recommendation, and as far as he was concerned, he would not undertake the responsibility of carrying it out.

Mr. HALSE observed that the persons who brought forward those recommendations at the last meeting were now absent.

Mr. CHILDS, in answer to a question, stated that the board had no power to make a bye-law affecting the rights of shareholders. He thought the time would come when it would be necessary to make some important change in the constitution of the company, but according to the present feeling of shareholders, he should recommend that the question be not at present further proceeded with.

Mr. BIRDSEY hoped when a change did take place that he would never see Tincroft placed under the Limited Liability Act, for applied to mining companies it was a great bugbear. Mr. FIELD thought that nothing could be more absurd than the application of the Limited Liability Act to mining enterprises, for if they wanted to increase the capital it had to be raised upon most disadvantageous terms.

After some further discussion, it was resolved that the question of the change in the constitution of the company be not further proceeded with at this time.

Thanks having been voted to Mr. R. W. Childs, for his advice and assistance, the usual compliment to the Chairman was passed, when the proceedings terminated.

DEVON NEW COPPER MINING COMPANY.

The ordinary meeting of proprietors was held at the company's offices, Barge-yard Chambers, on August 2.—Mr. CHARLES OTTER in the chair.

Mr. PAGE (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. The accounts showed a credit balance of 2021l. 5s. 7d.

The report of the directors was read, as follows:—

The directors have prepared for the information of the shareholders the following statement of the progress of the mine since the last general meeting, held on March 21 last. At that date the distance driven into the great north lode at the 68 fm. level was 2 fms. 2 ft. 7 in. This work was continued until July 4, when having completed 35 ft. 11 in., the cutting at this point was abandoned, without having gone quite through the lode. The result of this cutting was that a leader of highly crystallised muddle was cut through, about 18 in. wide, which is regarded as of considerable importance by the captain, who states that in his opinion it is likely, if continuous, to be productive of copper ore at the 78; and though no ore of a saving quality was obtained at the 68, yet the remark of the captain was fully proved, that the mine improved at every level as it gained in depth. In the 58 an end had been driven west on the lode for 20 fms., and a cross-cut made into the lode then to a distance of 3 fms. 1 ft. 2 in. This work was carried on until April 12, when a distance of 23 ft. having been reached it was suspended, under the advice of the captain. In the 68 an end was driven east on the face of the lode, and at the last meeting had reached 4 fms. 2 ft. 4 in. This was carried on until April 23, when having arrived at a distance of 10 fms. from the engine-shaft, it was determined to cross-cut into the lode at this point. This cross-cut was carried 10 ft. into the lode, and was discontinued on May 30. At the date of the last meeting the engine-shaft had been sunk 1 fm. 4 ft. 5 in. below the 63, and by the first week in June had been carried down to the 78, thus entirely fulfilling the promise of the captain, as stated in the last report, that he would use his utmost endeavours to complete it to that level by the end of May or beginning of June. The sinking of the engine-shaft is being vigorously carried on; it is now 8 ft. 9 in. below the 78, and the directors are again promised that they may hope to reach the 88 by the end of October. The directors have to report that the lode is becoming vertical, and that a beautiful floor of white killas has made its appearance at the bottom of the engine-shaft. A cross-cut has also been driven into the lode at the 78 fm. level, and the directors are happy to state that the ground has again improved, and that a leader of quartz, muddle, and yellow copper, of about 1 foot wide, has been cut through at a distance of 12 feet into the lode; samples of this, selected by Capt. Hawke to show the fair character of the leader, have been sent up, and are now lying on the table. This ore has been assayed by Dr. Percy, of the Museum of Practical Geology, in Jernyn-street, and his report states that a fair average sample obtained by pulverising the whole of the large specimen gave by wet assay 57.27 per cent. of copper, and a portion of the ore detached from the vein stuff in the smaller specimen gave 12.6 per cent. of copper. The directors are opening out east and west upon this level in hopes that it may increase in size, and they are also pushing forward the cross-cut in this level the leader of the crystallised muddle cut through in the 68; this they expect to reach in about three weeks. It will be seen from the balance-sheet that the total amount of capital received since the formation of the company, Nov. 9, 1858, is 7093l. 6s., exclusive of 15,000l. the amount of the purchase shares. The works were begun in April, 1859, and carried on until Oct. in that year; the mine was then laid in, but was commenced again in March, 1860, and has been vigorously carried on since. The total amount expended since the formation of the company has been 6277l. 5s. 1d., thus leaving 825l. 19s. 1d. in money at the bank and on security. There are also arrears of calls, and a call not yet made, amounting together to 1386l. 10s. The directors have no steps to reduce the amount of calls in arrears, and trust that they will thus have sufficient funds to carry on the mine to a successful result, but should that not be the case, they will call a general meeting of the shareholders, to consider the mode in which further capital shall be raised. No arrangement has yet been come to for the disposal of the silver ore, but the captain reports that Messrs. Todd, of Falmouth, propose to make some alteration in their furnaces, so as to extract the valuable minerals contained in this ore. The directors are happy to state that the engine and machinery are in perfect working order, that they have every reason to be satisfied with the management of the mine by Capt. Hawke, and that the purchase of horses by the company has fulfilled their expectations in the lessening of the cost of working. The directors have, lastly, the gratification to state that they have agreed upon a lease of the Smerdon, upon terms which they consider to be liberal on the part of the lessors and advantageous to the shareholders of the company.

The CHAIRMAN, having moved the adoption of the report and accounts, explained the chief points of operation, and concluded by congratulating the proprietors upon the recent favourable change which had taken place in the character of the ground, in which they had reason to suppose a large deposit of mineral would be discovered.

Mr. S. WOOLMER stated that during the past few months he had several times visited the mine. With regard to their agent, he believed him to be an able and energetic man, and everything under his charge was kept in excellent order. The importance of the mine which had taken place in the character of the ground was most encouraging. Professor Ansted had said that the ground was peculiarly favourable for the production of copper, that the blue killas was a disadvantage, but if it changed to a white killas it would be a great improvement. That change had taken place, and, therefore, they had reason to hope that some important result would soon be attained. It was also satisfactory to know that a change had taken place in the position of the lode, it being now more perpendicular, which was a very favourable indication. With reference to the future development of the mine, it would be necessary, he contended, to increase the capital, because, however valuable the discoveries might be, they could not be brought to successful results without the outlay of the whole of the amount due upon the unused shares, but merely that the directors should be empowered to issue them at their discretion.

Mr. BARRY said that the directors felt they would be supported by the shareholders at large in any step they took; and, therefore, should any question at any time arise, they would take the best opinions upon it, when a special meeting of shareholders would be called, before which the matter would be laid. For his own part, he suggested the advisability of borrowing money upon interest, rather than increasing the company's capital; for if they got plenty of ore at bank, there would be no difficulty in soon obtaining the necessary machinery.

The report and accounts were then received and adopted.

ode in the engine-shaft improves a little in driving east. The cross-cut is being pushed on towards the south lode as fast as possible, which we hope soon to reach.

EAST WHEAL FALMOUTH.—Wm. Hancock, Aug. 6: Our progress in sinking the new engine-shaft since my last has been rather slow, by means of the water issuing so strong from the lode; the lode is improved in size, just the same character as last reported.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennett, Aug. 7: The lode in the engine-shaft maintains its size, and is producing from 3 to 4 tons of ore, with some good work for tin, to the fathom; altogether worth from 20 to 25 per fathom. The lode in the 35 west is nearly 2 ft. wide, looking a little better for copper than it did on the last taking down, producing full 2 tons of ore, with good work for tin, a very promising lode. The lode in the 25 east continues in two branches; the south one is 1 ft. wide, of quartz, prisms, and gossan, with a little tin, and occasionally stones of ore; the same may be said of the north branch; these we drive east appear to be approaching each other. The lode in the 25 west is 2 ft. wide, of gossan, quartz, and prisms, with good stones of ore and munda; we think the lode here is looking better than it has before for several fathoms driving. There is no alteration in the lode in the air-shaft, but the ground is stiffer.

EAST WHEAL RUSSELL.—John Goldsworthy, Aug. 7: At Homersham's shaft, in the 110 east, the driving is being commenced east and west on the course of the north part of the lode; the lode is composed of capel, prisms, munda, black and grey copper ore, and produces 1½ ton per fathom, with a kindly appearance to further improve. In John's winze, sinking in bottom of the 100, the lode is large, and produces a little rich ore, by present appearances it will soon improve. In the 100, east of Davis's cross-cut, the lode is 2 feet wide, and showing indications of an improvement. The 100, west of Davis's cross-cut, will produce ½ ton of rich ore per fathom. In the rise in back of the 100, on the south part of the lode, the lode is 2 ft. wide, producing saving work. The slope in the back of the 100, east of Davis's 2 winze, is worth 13½ per fathom. The slope in bottom of the 88, on the north part of the lode, east of Henry's winze, is worth 4½ per fathom. The lode in the 88 east is 3 ft. wide, composed of quartz, prisms, and ore, and produces 2½ tons of rich ore per fathom, a fine looking lode. The lode in the 88, west of Henry's engine-shaft, is large, composed of iron, capel, &c., with stones of ore. There is no change in the 66 east to notice since last reported.

J. Richards, Aug. 8: Homersham's shaft is in regular course of sinking below the 110, in ground tolerably favourable for progress.—Homersham's Shaft: In the 110 cross-north the main part of the lode is cut through, and the drive turned east and west on the course thereof. It is 3 ft. wide, the leading part being 18 in. wide, composed of peach, munda, and black oxide of copper ore, worth 1½ ton per fathom. In the 100 east, and east of Davis's cross-cut, on the north part of the lode, the lode is 3 ft. wide, composed of munda, peach, quartz, and a small branch of black ore, the whole height of the drive, and is promising. In the 100 east, west of Davis's cross-cut, on the north part of the lode, the lode is 3 ft. wide, and contains ½ ton of ore per fathom. In John's winze, sinking below the 100 east, the lode is 3 ft. wide, and worth ½ ton of ore per fathom. In the 88 east, on the south part of the lode, the lode is worth 2½ tons of ore per fathom. In the 66 east the lode is large (4 ft. wide), and consists of capels, munda, peach, and occasionally rich stones of yellow copper ore. In the 88, west of Henry's engine-shaft, the lode is 3 ft. wide, in which good stones of ore are frequently met with.

EAST WHEAL FALMOUTH.—J. Richards, Aug. 7: Redruth Consols Lode: The lode in the 70 east, east of John's shaft, is 1 ft. wide, composed of spar, peach, and good stones of ore; a kindly lode, but not rich. In the 70, west of John's shaft, the lode is 15 in. wide, consisting of fluor-spar and copper ore, yielding 1½ ton of copper ore per fathom; a very pretty looking lode. Nothing new in any other bargain in the mine.

FURSDON.—J. Hampton, J. P. Daw, Aug. 2: The 21 west is worth quite 3 tons of good average quality ore per fathom, and we have a specimen now in the office to send up that you may see the increase of quartz. The 11 east and west are turning out fair quantities of ore. We have to-day dilled the mine, and laid it on the map, and find the lode in the shallow adit, 11 west, and 21 west to be the same thing.

GARRETT.—W. Sallow, Aug. 7: The lode in the 30, west of engine-shaft, is about 2 ft. wide, composed principally of carbonate of lime, with also a mixture of lead ore, producing 5 cwt. per fathom, and likely to improve. In the 20, going west on the old lode, the lode is 6 ft. wide, composed of carbonate of lime, clay, &c., with also a good mixture of lead ore. The new shaft is not holed to the level as yet, but we are now near enough to call to each other, and therefore, I expect to get through in a short time.

GOGGINAN.—Aug. 6: The lode in the 100 fm. level, east of Gilbertson's, is intermixed with good branches of lead ore, yielding good saving work. In Bryn Pien shaft, sinking below the 60, the lode is 4 feet wide, yielding a little ore, but not to value. The lode in the pitch over the 12, east of winze, 15 fms. west of Gilbertson's shaft, below the 60, on the north lode, yields 12 cwt. per fathom. The pitch over the 60, on the north lode, yields 15 cwt. per fathom. The lode in the pitch over the same level, 180 fms. east of Gilbertson's, is 5 feet wide, producing 14 cwt. of ore per fathom. The pitch over the 40 yields 7 cwt. of ore per fathom. The pitch over the 80, 10 fms. east of Taylor's shaft, yields 12 cwt. of ore per fathom. The pitch over the 80, 10 fms. east of Gilbertson's, on the north lode, yields 8 cwt. of ore per fathom. The lode in the tribute pitch over the 100 yields 10 cwt. of ore per fathom. The pitch over the 100, 80 fms. east of shaft, yields 9 cwt. of ore per fathom. The lode in the pitch in the back of the same level, 60 fms. east of shaft, yields 8 cwt. of ore per fathom. The pitch over the same, 15 fms. east of Gilbertson's, yields 7 cwt. of ore per fathom. The lode in the pitch over the 110 yields 8 cwt. of ore per fathom. All other points are without alteration.

GREAT BUSY UNITED.—Delbridge, J. Petherick, E. Richards, R. Giles, J. Bryant, Aug. 3: The sumpmen are engaged fixing plunger and rods at the 120. In the 120 rise against Fielding's shaft the lode is poor. In the 120, east of Offord's lode, the lode is 3½ feet wide, yielding stones of copper ore, and with a very kindly appearance. In the 110, east of ditto, the lode is 5 feet wide, yielding stones of ore, worth for tin, as per sample, 12½ per fathom. The 100, east of ditto, is yielding 15 tons per fathom. Kiteley's winze is yielding 12 tons per fathom. No. 2 winze is yielding 12 tons per fathom. The 90, east of Matthews's, is worth for tin and copper 70½ per fathom. The 90 rise, against Matthews's shaft, is worth 70½ per fathom. Matthews's shaft, below the 80, is worth 10 tons per fathom for tin. In the 80, east of ditto, the lode is large, with a little tin. In the 70, east of ditto, the lode is yielding low price tiniferous. In the 100, west of ditto, the lode is 4 ft. wide, stamping work. In the 90 rise west, below Moly's bottoms, the lode on the south part is 20 inches wide, stamping work. In the 80 rise, against King's shaft, the lode is very wide, but poor. In the 70 north cross-cut there is good ground; no appearance of any lode as yet. In the 50 west the lode is very wide, composed of stones of copper ore; not much to notice. Our tribute department mnh as for the past taking.

GREAT CRINIS.—W. Woolcock, Aug. 3: To-day being our monthly setting the following bargains were taken:—The new shaft to sink below the 110, by eight men, at 12½ per fathom, for 20 fms.; the shaft is now down 6 fms. 3 ft. 6 in., the ground is without any material alteration, and we are pushing it on with all possible speed. The 100, to drive west, by six men, at 6½ per fathom; we have a very promising lode here, which we are carrying upwards of 6 feet wide, and although the north part, or leader, is not quite so large as last reported, taking the lode throughout it has improved in value, and is presenting every appearance of being near a deposit of ore. The end is in from 27 to 30 fathoms west of the shaft, and the run of ore ground dipping east will in all probability come into the shaft about the 120, where we intend cutting into the lode, and I have no doubt but at that point it will be found productive. The cross-cut to drive south, in the 100, by six men, at 4½ per fathom, 2 fathoms stent; the ground here is becoming more wet, showing indications of our getting near a lode or branch. The 90 cross-cut, west of ditto, by four men, at 4½ per fathom; the lode is without alteration in appearance since last reported. The tributaries are busily engaged in dressing up their ore for another sampling, which will be upwards of 40 tons, of better quality than the last parcel.

J. Webb, August 8: The engine-shaft is sunk about 6 fathoms 4 feet 6 inches below the 110 in the north lode; at present we do not intend cutting into the lode before we reach a 120 fm. level. The lode in the 100 west is continuing its favourable appearance, and looking promising for a bunch of ore; the part we are carrying is upwards of 6 feet wide, composed of a very congenial spar, and containing good stones of yellow copper ore. In the 100 east, we are still cross-cutting south, and are still per-suaded we shall find some portion of the lode here. The lode in the 100 east, north, and is without much alteration. We shall sample on Monday next full 40 tons of copper ore.

GREAT RETAILLACK.—Wm. H. Reynolds, Aug. 3: The sparry part of the lode is enlarging as we go down, and the whole of the lode in the shaft is more or less lode; the character of the lode has undergone a decided change for the better, and we believe that we are coming down upon a good bunch of lead; the shaft is set to eight men, at 6½ per fathom. In the eastern end at the 35 we have a capital bunch of blende, and have laid open many hundred tons of this ore; this end is set to one man and one boy, at 2½ d. per fathom. The 35 west is set to one man and one boy, at 30s. per fathom, and is laying open tribute ground. We have one man opening on a branch at the 35, which we suppose to be part of the Peru lode; it is about 2 inches wide, and composed of flookan, munda, and blende.

GREAT SOUTH TOLGUS.—J. Daw, August 7: The lode in Lyle's shaft, sinking below the 125, is 1 ft. wide, producing stones of copper ore. The lode in the 112, west of Lyle's shaft, is 1 ft. wide, unproductive. In the rise in the back of the 100 west the lode is 1½ ft. wide, producing a little ore. In the 90 west the lode is 2 ft. wide, producing stones of ore, but not enough to value. The lode in the 90 cross-cut north is still disordered by the cross-course, and is producing some good ore.

GREAT WHEAL ALFRED.—W. Bughehole, J. Delbridge, Aug. 7: The lode in the 220, west of Copper House shaft, is 4 ft. wide, composed of spar, munda, and capel—poor. The lode in the 210, west of the latter shaft, has a better appearance—fine rich quality ore in it, and we expect to cut the main bunch of ore in a day or two that is gone down in the bottom of the 200. We have cut a large stream of water in this end, and drained the 200 dry; this end is now worth 12½ per fathom. The lode in Moon's winze is 4 ft. wide, with good stones of ore in it. The lode in Kemp's stop, in back of the 210, is worth 18½ per fathom. Stop No. 1, in bottom of the 210, is worth 30½ per fathom. No. 2, 25½ per fathom. Stop No. 1, in back of the 210, is worth 22½ per fathom. No. 2, 20½ per fathom. No. 3, 17½ per fathom. No. 4, 20½ per fathom. No. 5, 35½ per fathom. No. 6, 35½ per fathom. No. 7, 35½ per fathom. No. 8, 34½ per fathom. These stops are valued according to the present standard of copper and blende.

GREAT WHEAL BADDERN.—J. Hampton, J. Jenkin, Aug. 6: The ground in each end, in the 63, Hill Brothers shaft, is much the same as last reported; the ends are apart from each other about 4 fms. 4 ft., in which we have intersected several branches containing lead, seen above in the shaft. Landon's shaft is now down about 8 fathoms from surface, and about 2 fathoms in the elvan, which we believe is a good indication, and no doubt shall meet with a good lode of lead. The water is rather quick, but we are pressing on as fast as we possibly can. We intend to erect the horse-whim forthwith.

GREAT WHEAL MARTHA.—H. Rickard, Aug. 7: The engine-shaft is sunk below the 40 fm. level 5 fms., and still in good mineralised kila; the men are making rapid progress. The lode the 40, east of engine-shaft, is rather harder than last week, and not yielding quite so much copper ore, yet a very kindly lode indeed. The slope in back of this level are without alteration since last week, worth 30½ per fathom. We have nearly effected a communication between the 30 and 20 fm. levels, at Thomas's shaft. I expect to do so every hour, as we can hear each other speak. The lode is not yet cut through in the 20, west of Thomas's shaft, worth at least fully 4 tons per fathom, of moderate quality copper ore, besides yielding a large quantity of munda. The tribute pitches are much as usual, and yielding their full quantities of ore as for some time past. The whim-engine is nearly put in, and the boiler will be on the mine by to-morrow, the boiler-house being ready to receive it. The crusher-house is in a forward state of building. The prospects of the mine were never more encouraging than at present, which the ore does very evidently show forth.

GREAT WHEAL VOR UNITED.—T. Gill, F. Francis, T. Harris, Aug. 7: In the 142, driving east on the north lode, the lode is 1½ ft. wide, and worth about 20½ per fathom. In the 142, driving east of Metal shaft, on the south part of the lode, the lode is 1½ ft. wide, worth 18½ per fathom. In the 142, driving east of Metal shaft, the lode is 2½ ft. wide, worth about 7½ per fathom. In the 132 fm. level driving east of Metal shaft, the lode is 2½ ft. wide, worth about 7½ per fathom. In the 132, driving west of Metal shaft, the lode is 2½ ft. wide, worth about 7½ per fathom. In the rise in back of the 122, east of Metal shaft, the lode is about 2½ ft. wide, worth 6½ per fathom. In the 122, east of Metal shaft, the lode is about 4 ft. wide, and worth 30½ per fathom. In the slope in bottom of the 132, east of Metal shaft, the lode is 4 ft. wide, worth 30½ per fathom. We expect to get Metal shaft down to the 132, and commence to drive to explore the lode in the course of ten days. We should have been prepared to drive this week had it not been for the loops parting on the fend-off bob, but things are working very well at present.

GURLYN.—J. Curtis, W. W. Martyn, J. Reece, Aug. 7: The 60, to drive east of the

engine-shaft, by four men, 3 fathoms, at 4½ per fathom; lode worth 16½ per fathom for copper ore. The 60 to drive west of shaft, by four men, at 4½ per fathom; lode worth 7½ per fathom for tin. The 50, to drive east of engine-shaft, by two men, 3 fathoms, at 2½ per fathom. The 50, to drive west of engine-shaft, by four men, 5 fathoms, at 2½ d. per fathom; lode 2 ft. wide, opening tribute ground. The 40, to drive west of Bawden's shaft, by two men, at 2½ d. per fathom. The 30, to drive east of the engine-shaft, by two men; lode 2 ft. wide, and about pay for driving. The 40, to drive east of the sump cross-cut, on Riches' lode, by four men, at 3½ per fathom. The 40, to drive west of ditto, by six men, at 6½ per fathom; lode 18 in. wide, opening tribute ground. The new shaft to sink below the 10, by six men, at 18 in. wide. We have 34 men on tinwork, and 50 men on tribute.

GWYDYR PARK CONSOLS.—Capt. Smith, Aug. 8: I have taken down the lode in the deep adit this week; it is 1 ft. wide, yielding saving work.

HAWKMOOR.—J. Richards, J. T. Phillips, Aug. 6: The lode in the 25, east of Rowe's rise, continues a fine course of ore, worth from 3 to 4 tons of copper ore per fathom. We are preparing another parcel of ore for market.

HEBODSFOT.—T. Trevillion, Aug. 6: The lode in the 137 still continues small and poor. The lode in the 137 is 18 in. wide, and will yield 8 cwt. of lead per fathom; there are three stops working in the back of this level, yielding on the average 10 cwt. of lead per fathom. The lode in the 117 is 2 ft. wide, and will yield 13 cwt. of lead per fathom, with good ground for driving; present price 3½ per fathom; there are three stops in the back of this level, yielding on the average 13 cwt. of lead per fathom. The lode in the 106 is 2 ft. wide, and will yield 10 cwt. of lead per fathom; there are five stops working in the back of this level, yielding on the average 9 cwt. of lead per fathom. The lode in the 82 end is small, owing to being disordered by a slide. The lode in the 70 will yield 7 cwt. of lead per fathom. The rise in back of the 70 is up 15 fms., and the same being in a sly channel of ground, disorders the lode, which is split up and poor. The new shaft will be driven by the end of the month 50 fms.; the ground is much cleaner than it has been, and good for tin, and in the same. On the whole, the mine is in good working order. We sold 80 tons of lead, which realised 24½ d. per ton. We had to make a sale in two or three weeks time 70 tons of seconds, and our next sampling of crop will be 85 tons. The machinery throughout the mine is in first-rate order.

HEWARD UNITED.—T. Pierce, Aug. 8: We shall finish the south cross-cut from Foulke's sump in three days from this date, and then commence working on the new vein, or rib of ore, mentioned in my report six weeks ago. Parry's sump, below the 80 yard level, east of Dunsford's shaft, promises a little more than the above—the 55 yard level, west from Dunsford's shaft. We have cut into a stream of water in the forebore, which leads us to think we are very near the Old Panty-Pydney vein. All other parts of the mine are without alteration without any material change.

HINGTON DOWN CONSOLS.—T. Richards, Aug. 7: The 100 west has a very encouraging appearance, and will produce 5 tons of ore per fathom.

HOLMBUSH.—R. Pryor, T. Woolcock, Aug. 3: We have put the men in the 175, east of shaft, to rise against the winze in bottom of the 160, where we have about 9 feet to hole; as soon as this is effected we shall at once resume driving the end, where the lode is worth 15½ per fathom. The 175, west of shaft, is in the cross-course. The 160 west is improved; lode worth 20½ per fathom; we have a winze about 6 fms. behind this end down 11 fms. below the 145, on the south part of the lode. Two pitches in back of the 160, by eight men, at 5s. 6d. in 1½. The pitch in bottom of the 160, east of shaft, is looking very well, at 5s. 6d. in 1½. Lead lode: We have driven the 100, west of the lead lode, on some small branches about 4 fms., and finding them poor, we have put the men to cut through the lead lode. The 160 south is producing saving work. We are still driving by the side of the lode in the 145 south, and have intersected some copper branches, which appear to be part of flap-jack lode.—Flap-jack lode: In the rise in back of the 100 the lode is worth 2½ tons per fathom. We have about 6 ft. more to drive to communicate the 60 east of rise, with the 60 west of winze, in bottom of the 50, which will lay open some good tribute ground. In the rise in back of the 50 the lode is yielding 2 tons per fathom. Two pitches in back of the above level, by eight men, at 5s. 6d. and the other at 2s. In the 20, east of Wall's shaft, the lode is worth 2 tons per fathom. The rise in back of the above level is improved; lode worth 4 tons per fathom. In the pitch in back of the 20, west of rise, the lode is yielding 4 tons per fathom. The adit level east has a better appearance than when last reported on. We are very busily engaged in dressing for the next sampling. Copper ore weighed off last week, 258 tons 6 cwt.

HUCKWORTHY BRIDGE.—Jas. H. Rodda, Aug. 8: The lode in Hitchens's shaft is 3 ft. wide, presenting a more promising appearance than for some time past, composed of peach, munda, prisms, and stones of ore. No alteration in the 25 east since last report.

KELLY BRAY.—S. James, August 3: Eastern Mine: The lode in the 70 east is about 11½ ft. wide, composed of quartz, munda, and spots of ore, carrying regular wash, a much more promising lode for the production of mineral than was found in the 60, just over the above-named point, and the ground is easy for progress—set to six men, at 6½ d. per fathom, one month stent. My idea is to get under the ore ground which was driven through in the 60 with all possible dispatch, which we consider is about 20 fms. ahead. We intend to commence a winze in the bottom of the 60 next week, about 30 fms. east of cross-cut and west of the bunches of ore passed through in the 60, where we are hoping to meet within the above shoots of ore as we proceed in depth. The ore which has been discovered is all dipping west towards the shaft in the 60, and if the above spots of ore are met with in the winze there will be a valuable mine opened in a short time, the end being easy for exploring, and the machinery of the first quality. The lode in the 60, east of ditto, is 2 ft. wide, and the lode appears to be in a disordered state at present, showing indications that the elvan course is near at hand, or a cross-cut; the ground is easy for exploring—set to four men, at 4½ d. per fathom, and they pay for wheeling the stuff; one month stent. We weighed off on the 26th July 84 tons 14 cwt. of ore, and hope to sample on August 5 about 70 tons.

LADY BERTHA.—Capt. Harpur and Metherell, Aug. 5: Since our report of Thursday we are pleased to say we are through the cross-course in the 53 east; so far as seen it is composed of munda, capel, and stones of ore; we are not yet sufficiently off the influence of the cross-course to say more about or state its correct breadth; in the same level west the ground is much improved, being a soft light kila, having a congenial appearance for the production of mineral. All other parts of the mine are without any material change.

Captains Harpur and Metherell, Aug. 8: In the 33 fathom level, both east and west, we have no material change to inform you of since our last. In the 41 east the lode is about 3 ft. wide, composed of peach, munda, and quartz, with occasional stones of ore. The lode in the steps in back of the 41 west is from 3 to 4 ft. wide, composed of ore and munda, worth of the former 3 tons, or 18½ per fathom. The lode in the 30 east is 4 ft. wide, consisting of peach, prisms, munda, and ore, worth of the latter 3 tons, or 12½ per fathom; the lode in the steps in bottom of this level is 4 ft. wide, carrying munda, peach, and ore, worth of the latter 6½ per fathom; we have just commenced to drive the lode of this level west, where the lode is quite 3 feet wide, composed of munda, peach, and ore, worth of the latter 3 tons, or 2½ per fathom. In the 20 east no work has been taken down lately. The lode in the 10 east is 3½ ft. wide, composed of munda, peach, and ore, worth of the latter 2½ tons, or 10½ per fathom. The tribute department continues to yield much as usual.

LADY ELIZA.—J. Evans, Aug. 8: There is no alteration since my last week's report. The lode continues to look well and promising.

LONG RAKE.—F. Evans, Aug. 7: The 48 fm. level east looks pretty fair for lead, worth 15 cwt. per fathom. I think we are getting into a nice run of ore ground here, as the lode improves daily. The west end is also looking better, with a prospect of another run of ore coming in soon. The shaft is in a nice limestone in the regular way of sinking. We have three parcels of tribute ore at 8½ per fathom, and 2½ per fathom. Very Melyn: Four men took a bargain at 10½ to clear up the shaft and level, and from all I can learn there is some lead ground to work in this part of the mine, or will be after this bargain is completed.

LOWER PARK.—W. Davies, Aug. 8: In the Paddock shaft the 20 yard level, driving south, is very favourable for driving, with some small spots of ore occasionally. The office shaft has been sunk to the top of the sump, and the men are employed in securing the bottom of the shaft before commencing to open the sump. The cross-cut driving south is hard, and without alteration since last reported on.

MADLEY.—J. Tregay, Aug. 3: Old Mine: During this week the men have been employed in the deep adit clearing and stuff which had fallen down from the 15 level, and would occasion the water to run back again into the engine-shaft. The wheel is working well; the water is now down 3 fms. below the 20.—South Mine, Adit Level: The lode in the rise is composed of munda and spots of ore; in this level east the branches in the end are looking kindly.

MERLLYN.—Wm. Sandoe, Aug. 7: The new shaft, which is now in full course of sinking by eight men, is down about 6 ft. below the bottom level; the ground is favourable for sinking, and at present we have but very little water, which, if it continues, will make the sinking forward. The slope in bottom of the adit, and west of the cross-course, is producing a mixture of ore, and I expect the lode will improve as we further open it in the 20, going east from the new shaft, we are expecting very shortly to reach the junction of the north and south lode with this, the end now presents a kindly appearance during the past few days; we have crossed two or three small branches, producing strong spots of lead ore; therefore I have not a doubt but the lode when reached will produce satisfactory results.

MICHELL.—W. Sandoe, Aug. 9: Saturday last being our setting-day, we set a level to drive both east and west from the bottom of the new shaft; taken at 6½ per fathom, 6 fms. each way; the lode here is of a most promising character, and I have no doubt but that it will prove productive when further explored. We also set a small trial shaft to sink about 20 fms. west of the present shaft; at this point the lode is 3 ft. wide, and producing fine stones of ore, at a depth of 4 ft. below the surface, this was taken at 30s. per fathom, for 3 fms. As a whole I consider the prospects very encouraging.

MOLLAND.—T. Bennett, Aug. 7: The lode in the 32 east is 2½ ft. wide, producing 1 ton of ore per fathom; the best part of the lode is, however, in the bottom of the end, and will undoubtedly rise as we extend east. The lode in the 20 east is 2 feet wide, composed of quartz, white iron, spotted with yellow copper ore, and intermixed with patches of kila; the ground appears to be coming easier than last week. The slopes in bottom of this level are producing as usual—1½ ton of ore per fathom. Our ore was weighed off on Monday evening last, and will be sold on Thursday, the 22nd inst.

NANTY ANS PENKRY.—H. Boundy, Wm. Paull, Aug. 6: On Saturday last the following bargains were set:—Bewickgwyn The 30 to drive east, by four men, at 5½ d. per fathom; the lode yielding 8 cwt. of ore per fathom.—Eryantun: The 10 to drive east, by four men, at 7½ d. per fathom; the lode is 6 feet wide, with a mixture of ore throughout, yielding 8 cwt. per fathom. The 10 to drive west, by four men, at 8½ d. per fathom; the lode is yielding 20 cwt. of ore per fathom. The winze to sink below the adit, by two men, at 6½ per fathom; the lode is yielding good stones of ore. The slope in the back of the adit, east of No. 3 rise, by eight men, at 3½ per fathom; the lode is yielding 10 cwt. of ore per fathom. The slope in back of the adit, west of No. 3 rise, by four men, at 2½ d. per fathom; the lode yielding 8 cwt. of ore per fathom. The slope in back of No. 2 rise, by four men, at 2½ d. per fathom; the lode yielding 12 cwt. of ore per fathom. The lode in the 10, east of No. 2 rise, by four men, at 6½ per fathom; the lode is 4 ft. wide, composed of munda, blende, and lead ore, yielding of the latter 8 cwt. per fathom, and presenting a very promising appearance. Three stops in back of this level, to twelve men, at 2½ per fathom, the lode averaging from 8 to 10 cwt. of ore per fathom. All the trammings of the stuff to the mouth of the level at 12½ per month, cart included. Four men are engaged cutting ground for the drawing-machine. Tribute the same as last month.

NANTY-YAGO.—J. Roach, Aug. 3: We are sinking under the deep adit, east of engine-shaft; the lode has improved a little in quality since last reported upon. We expect to communicate with the 10 in the ensuing month, when we shall be thoroughly ventilated, and consequently able to stop the ground discovered here. The ground, west of winze, west of engine-shaft, we have commenced opening; we have let 10 fms. at 10s. per fathom; from present appearances I believe it will yield a fine quantity of ore. I shall be able to give my decision on this in a few days hence. Other places in the mine the same as when I furnished my last advice.

NEW TRELEIGH.—J. Browne, J. Prince, Jun.: There is no alteration in Carr's engine-shaft since last reported on. In the 80, east of Carr's engine-shaft, the lode is 5 ft. wide, and no south wall; worth for copper ore 3 tons per fathom; this is presenting good appearances for further improvement when cut through, the south part of the lode being generally 13 ft. wide, and the rise in back of the 80 will produce 3 tons of ore per fathom, and a winze sinking below the 70, over this rise, will produce 2 tons per fathom. The 70, west of Wheel Maria north lode, will produce 2 tons per fathom. There is no change to notice in any other part of the mine.

NORTH BASSET.—T. Glianville, G. Davey, Aug. 7: In the flat-rod shaft the lode is 2 feet wide, yielding good stones of grey ore. In the 142 east the lode is 1 ft. wide, com-

posed of spar, munda, and stones of copper ore. In the 132 west the tin lode is 3 feet wide, worth 6½ per fathom. In Grace's shaft the lode is 3½ ft. wide, composed of fluor-spar, munda, and good stones of yellow copper ore. In the 92, west of Grace's shaft, the lode is 2½ ft. wide, producing 1 ton of ore per fathom.

NORTH BULLER.—J. B. Delbridge, Aug. 3: The lode in the different ends throughout the mine are much the same as last reported. In King's shaft we have an increase of water in consequence of so much rain in the past week or two; the lode in the shaft is as last reported. The engine and pitwork are working well.

NORTH HAPOD (Devil's Bridge).—A. Francis, August 7: In uncovering on the line of the lode we are meeting with very fine lode stuff, exactly identical in character with the Frognoch vein stuff, and as we proceed everything indicates a good mine, and the great masses of ore, both east and west upon the same lode, makes the evidence sufficiently strong that an excellent mine will soon be opened along the line of this lode in this ground. The surface of the vein continues to present a strong and beautiful gossan, with some lamps of beautiful ore in the old and new stuff brought to surface.

NORTH GREAT WORK.—J. Pope, Jun., Aug. 6: The lode in the 10, east of Lloyd's shaft, has been small for the last 3 or 4 ft. driven, but at present it is opening again in the middle of the end; it is 10 in. wide, and with which I broke some good work for tin to-day.

NORTH JANE.—S. Sims, Aug. 7: We have this day set the following bargains, &c.:—Kerr's shaft to sink by eight men, at 11½ d. per fathom. The 12 fm. level to drive west of engine-shaft, by two men and two boys, at 2½ d. per fathom. The 12 to drive east of gossan shaft, by two men and two boys, at 4½ d. per fathom. A winze to sink in bottom of the deep adit, west of gossan shaft, by four men, at 5½ d. per fathom, also four pitches to twelve men, at an average tribute of 12s. in 20s. Kerr's shaft is already sunk 3 fms. 4 ft. below the deep adit level. In the 12, east of gossan shaft, the lode is 1½ ft. wide, producing good stones of tin, worth 3½ per fathom. In the 12, west of gossan shaft, the lode is 2 feet wide, producing very good work for tin, worth 10½ per fathom. In the winze sinking below the deep adit level, now down 7 fms. 4 ft., the lode is 1½ ft. wide, worth 6½ per fathom for tin. The pitches are all looking very well, just the same as when last reported on. The new oven at the burning-house, which we set to build for the sum of 4½, will be completed by Wednesday, when we shall commence burning with both ovens. We have sold 40 tons of munda at 16s. per ton; we shall be able to raise 50 tons per month. The stamps are working very well, stamping about 18 tons of tinstuff per week, which will average 35 pounds of tin to the ton of stuff.

NORTH NANTY-MWYN.—J. Thomas, Aug. 8: Our prospects are daily improving, as by driving on the lode west from shaft the ground is much softer than I expected, being composed of clay-slate and white flint; this is a good indication, and it is precisely of a similar character to the most productive mines in Cardiganshire. We are now 16 fms. from surface, and are continually finding large stones of lead ore, and also going through good grey ground, and the ore is holding down in the bottom of the level very good. I am convinced, as well as judging from the old workings, that this lode made ore close up to the surface.

NORTH MINERA.—W. T. Harris, Aug. 7: The engine-shaft is down 2½ fms. below the 35 yard level, the ground consisting of chert, of a congenial character for lead, and favourable for progress; for a few days the men are stopping in back of the said level, on the flat over the cross-cut gossan, and where we get good lead. Charles's shaft is down below this level 6 fms.; the lode is in a very disordered state, in consequence of a jet of shale; we anticipate, upon cutting through it, to find the lode again regular, and yielding lead; for the past month it has been producing good saving work for lead. The slopes in back of this level, both east and west of Williamson's, and on the flat, are producing about the usual quantity of lead per fathom as for some months past; the new branch, or lode, is as productive as ever—altogether, the slopes are looking well, and producing splendid ore. The 15 yard level, driving south on the flat, is also without alteration, producing about 15 cwt. of lead per fathom. At Wilson's shaft, the slope north and west is of a promising character, and yielding about 2 tons of lead per solid fathom. We shall continue the slope north with all speed, as we anticipate shortly to intersect a lode from which large returns have been made by the former workers. Our dressing department is in full course of operation, and we expect to dress from 40 to 50 tons for the ensuing month, if all things carry their present prospects.

NORTH WHEAL ROBERT.—J. Richards, Aug. 8: In the 52 west, east of Elliott's cross-cut, on No. 1 south lode, the drive is still by the side of the lode, in ground favourable for progress. In the 30, east of Edwards' cross-cut, on No. 1 south lode, no other part of the lode is yet met with. In Wright's rise, in the back of

tin, and about 1000. worth of arsenic and copper ore. I expected to have had larger returns ere now, but our tribute in the 60, 50, and the 40 have considerably fallen off. I am glad to say, considering the improvement in the 40 end as we near the cross-course, a cross-course only seen at the 70 and the 80, together with the very kindly appearance of the lode, and moderate ground in the 70 and the 80 ends, that there is a hope to get back the outlay with the interest; I may also add that the 151. difference in the price of first and last sale is solely owing to the fall in tin, and not quality.

ROSEWALD HILL AND RANSOM UNITED.—E. Thomas, Aug. 6: The lode in the 110, east of the Ransom shaft, is a little improved. The lode in the end driving west of the Ransom, at this level, is from 3 to 4 ft. wide, producing good stones of tin; at present it is a promising lode. No change worthy of notice in any of our other workings.

ROSEWALD CONSOLS.—J. Richards, Aug. 6: In the 40, driving east of the engine-shaft, the lode is 1½ foot wide—poor. In this level, driving west, the lode is 2 feet wide, with a branch in the south part 4 inches wide, saving work. No alteration in Ellen's shaft, sinking under the 10. The 20, driving east on the caunter lode, is 10 inches wide, opening tribute ground. We have resumed sinking the winze 6 fms. behind the end; lode 1 foot wide, worth from 8½ to 10½ per fathom for copper ore. No other change to notice throughout the mine since last report.

ROSEWALD UNITED.—H. Woolcock, Aug. 8:—In the 90, east of Jennings's shaft, the lode is 2 feet wide, producing a little ore. In the 90, west of footway-shaft, the lode is 2 ft. wide, unproductive. In the 80, east of Jennings's shaft, the lode is 2½ ft. wide, producing stones of ore. In the 80, west of footway-shaft, the lode is 2 feet wide, unproductive. In the 74, at Richards's shaft, the men are driving south to cut the lode. In the 53, west of Richards's, the end has a little improved since my last report; lode 18 inches wide, opening tribute ground. In the winze sinking below the 46, west of Richards's shaft, the lode is 2½ ft. wide, producing stones of ore. In the 46, east of Lane's shaft, the lode is 2 feet wide, producing a little ore. In the 34, west of Bush shaft, the men are driving north to cut the north or main part of the lode. In the 34, east of Lane's shaft, the lode is 2 feet wide, producing a little tin. Our tribute department has much improved during the last month. At Wellington shaft, sinking below the 22, the lode is 2 feet wide, producing stones of ore.

ROUND HILL.—R. Waters, Aug. 7: The lode in the 62, north of Betton's sump, north of the engine-shaft, is small and unproductive, but we expect an improvement at this point in the course of a few days. The lode in the back of this level, south of the said sump, will yield 25 cwt. of lead ore per fm. The lode in the slope north of the same sump will yield 10 cwt. of ore per fm. The lode in the back of the 62, south of No. 1 sump, north of shaft, will yield 1 ton of ore per fm. The lode in the slope in the back of the 60 north will yield 15 cwt. of ore per fm. The slope in the back of the 40 will yield 10 cwt. per fathom, and improving. We have six tribute pitches working, at an average tribute of 7½, all of which are yielding fair quantities. We shall sample a parcel of crop ore on Saturday next, computed 25 tons.

SCHULL BAY.—W. Thomas, Aug. 2: The sumpmen have fixed beams, cisterns, lift, &c., in the engine-shaft below the 8, all of which has been done without any mishap or accident. The sumpmen will, I expect, as I had calculated, finish their contract by tomorrow evening, after which we shall make good speed in sinking the shaft to the 16, and in order that there may be no delay when the shaft is holed to the 16 the pit in that level will be finished before the shaft is down, and everything ready for sinking to the 26. The slopes west of No. 4 winze and on the south part of Thomas's lode are without alteration, and producing good stones of ore. The new reservoir is giving us a fine supply of water, and will, I expect, make us independent of a supply from any other source, as the moment the reservoir at the mine is full we close the sluice at the big reservoir, or regulate the supply as required, so that not a drop runs waste. Dr. Thos. Hicks was here this week, and was, as well as the directors who saw it, very much pleased with the planning and building of the embankments. We are cobbing, crushing, and putting the ore to sale as fast as possible.

SIGFORD CONSOLS.—W. Hosking, Aug. 17: The 24, west of engine-shaft, has been driven 3 fms.; in the present end the lode is 3½ ft. wide, producing some good stones of copper ore. We have about 12 fms. more to drive to reach the junction of this with the caunter lode; the ground is rather hard for driving. On the north copper lode, the shaft (to communicate with the adit level, which is being driven east into the hill) has been sunk 6 fms. from surface, on the course of the lode. The adit has been extended 12 fathoms on the course of the lode, which averages 3 ft. wide for the whole distance driven, yielding at times splendid work for copper. We are sinking trial pits at the bottom of the hill, to endeavour to lay open the back of the great north tin lode, which is now producing splendid work for tin in the Smith's Wood Mine. I feel very confident of coming up this lode shortly.

SMITH'S WOOD.—W. Hosking, Aug. 7: On the south tin lode the adit level has been driven on its course 10 fms.; the lode varying in width from 3½ to 4 ft. wide, and producing magnificent work for tin; the lode continues its width and value; a deep adit level is being driven to intersect this lode at a greater depth. The great north tin lode has been opened on 8 fms. in length, 10 ft. in depth, and 9 ft. in width, and a fine pile of tinstuff has been raised from the same. The lode is now producing good work for tin within a few feet of Sigford Consols boundary; it is also looking well as extended on into the hill. We have made the excavation for the wheel-pit and lobby, and carried to the works all materials for its construction. The masons are actively at work, and we expect to be ready to put up the wheel in the course of six or eight days.

SORTRIDGE CONSOLS.—R. Jackson, Aug. 9: In the 62 west the lode is 2 ft. wide, yielding a little ore. In Mayne's rise, in back of the 50, on the south part of the main lode, the lode is worth ½ ton of ore per fathom. In the 50, driving south, west of Crew's cross-cut, and west of the eastern cross-course, no lode has been met with. In the 40, east of Head's rise, on the south part of the main lode, the lode is worth full 30½ per fathom, and looking promising for further improvement. In the 20, west of Arthur's cross-cut, the lode is worth ½ ton of ore per fathom.—No. 2 South Lode: In the 50 west the lode is small and unproductive. In Blanchard's slopes, in bottom of the 40, the lode is worth 1 ton of ore per fathom. In Rowe's shaft, in back of the 40, the lode is worth 2 tons of ore per fathom. In Lawry's rise, in back of the 30, no lode has been taken down this week. There is no change to notice in any other part.

SOUTH BRYN GWYOG.—J. Lloyd, Aug. 6: In the level driven east from the old shaft another caunter lode has been met with, which has caused the rib of ore to be weaker, but is still carrying ore through the said lode, and may be expected to improve after it is clear through it, and into farther ground. The new or Dunford's shaft is down about 7 yards; at present it is rather hard for sinking, and the lode rather narrow.

SOUTH CARADON WHEEL HOOPER.—W. C. Cock, Aug. 3: I think the ground in the 60 fm. level west is a little improved. Other places continue just as reported on at the meeting.

SOUTH CRENVER.—E. Chegwain, Aug. 6: In the flat-road shaft, sinking below the 105, the lode is 1½ ft. wide, producing stones of copper ore and munda. In the 105 east the lode is about 1 ft. wide, producing stones of ore, but not to value.—South Mine: In the 51, east of cross-cut, the lode is 2½ ft. wide, producing stones of tin and a little munda. In the 51, west of cross-cut, the lode is 3 ft. wide, producing stones of tin and good stones of copper ore; the lode in this end is improved in the last 6 ft. driving.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, August 7: Tutwot setting: The 50 cross-cut to drive north by six men, at 11½ per fm.; the adit east, on the caunter lode, by four men, at 7½ per fm.; and a slope in the back of the adit, by four men, at 5½ per fm.

SOUTH WHEEL BETSY.—W. Stephens, Aug. 6: In the end driving south of Ley's shaft we have cut a small caunter branch, about 2 in. wide, composed of spar and peach, with spots of copper ore. In the end driving north we have cut one of the branches which we had in the shaft, it is from 6 to 8 inches wide, composed of carbonate of lime, blende, and spots of copper ore.

SOUTH WHEEL KITTY.—S. Mitchell, Jun., Aug. 6: The lode in the adit level is improved in value, and greatly improved in appearance; we are saving all the lode as we break it from the end, which will all pay well for stamping; the ground presents a beautiful appearance about the lode. The lode in the engine-shaft is much the same as last reported on.

ST. IVES WHEEL ALLEN.—H. Taylor, Aug. 5: On Roderick's lode, the 20, east of Louisa's shaft, the lode is worth 3½ per fm. On Giesler's lode the shaftmen are cutting a pit in the 50 to prepare to sink the shaft. The slopes in bottom of the 50 east are worth 17½ per fm. The lode in the 50 west is worth 5½ per fm. The lode in the slopes in back of the 50 west is worth 7½ per fm. In the 30, east of Giesler's shaft, the men are stopping a piece of ground in the bottom to unwater the tin ground. All points of operation are much the same as last reported on.

TEES SIDE.—R. Bray, Aug. 7: This week the men have been cutting down the east end of shaft to make its length (9 ft. long). In taking down the Sun vein they met with a vug or cavity down the shaft, and in it they found some of the ore being good on the junction of the two lodes, and still going down. There is no doubt on this change of all in the hazel spot that we shall have more ore, as we had in the hazel above. This we have to prove there is every appearance of a good change. I will write again after we have cut out on the lodes. The ground is very hard and wet for blasting.

TOLCARN.—Aug. 7: Field's lode: The lode at Field's shaft, sinking below the 30, is 2½ ft. wide, composed of gossan, spar, and ore, and yielding fully 2½ tons of good ore per fm. for length of shaft, 12 ft. The lode in the 30 end, driving west of shaft, is 2 feet wide, composed of spar, gossan, and ore, and yielding of the latter ½ ton per fathom; in the same level, driving east, the lode is yielding 1 ton of ore per fm. The lode in the 20 west is 1 foot wide, composed chiefly of spar. In the 20 east the lode is 14 in. wide, composed of gossan and soft spar. The lode in the winze sinking in bottom of the 10 west is small and unproductive. The lode in the 10 east yields ½ ton of ore per fathom. The lode in the adit, driving east of shaft, is 15 in. wide, composed of gossan, spar, and greens, a kindly lode.—Enthoven's Lode: In striping down the north side of the western end the lode is 4 ft. wide, worth from 20½ to 25½ per fathom. The slope in back of the adit level, east of cross-cut, is not so good as when last reported, worth about 10½ per fm. for tin.—King's Lode: The ground in the rise in back of the adit level, under King's shaft, is rather hard. The men at King's shaft, sinking from surface, are making good progress.

TOLVADEN.—Aug. 7: We have put the pitwork in good order to commence the sinking of the engine-shaft under the 67, which we shall push on with all speed, believing that we are just skimming the top of a large run of rich ore, judging from the indications for 50 or 60 fms. west of the engine-shaft in the 40 and 50 levels. In the 40, from 70 to 80 fms. east of the engine-shaft, we have cut a leader of yellow ore, strongly impregnated with munda and black jack, this lode is very promising for a great run of yellow ore east of the grey deposits; this leader is at out 1 ft. wide.

TREFLACK UNITED.—J. Pope, T. Hodge, Aug. 6: The engine-shaft is below the 44 fm. level 13 ft. and ground cut on bearers, cistern, &c., and everything in readiness for fixing plunger-lift at once. The 44 is driven east on the West End lode 11 fathoms, which has intersected the cross-course: lode not yet cut on the west side, but from the appearance of the ground we expect to cut it daily. The 44 cross-cut is driven north of engine-shaft 6 fathoms; here we expect to cut the north caunter lode in the next 3 or 4 fathoms driving, and this lode has been very productive in the levels above.—North Lode: The 36 is driven east of wheel-shaft about 55 fathoms, and now through the eastern cross-course, but the lode not yet seen. We may hear remark the 26, east of this cross-course, was very rich for tin. The 36 is driven west of wheel-shaft 35 fathoms; lode 6 inches wide, producing saving work for tin, and likely to improve. In the 36 cross-cut, driving south towards the caunter lode, we expect to cut the lode in about a month from this time. The 16 is driven west of the wheel-shaft 30 fms.; lode 1 foot wide, composed of gossan, prlan, and munda, with good stones of tin, a kindly lode. It should be borne in mind that the mine is only 58 fathoms deep, and the water at present only drained to the 44, which is the bottom of the present engine-shaft. We should recommend that the shaft be sunk to the 56 with as little delay as possible, and as the 56 fm. levels are not driven more than 10 fathoms in length, indeed, not yet reached the tin ground gone down in the levels above, we have every reason to expect some good quantities of tin as soon as we reach this point, as the lode appears to increase in size and quality the deeper levels. Looking at the mine generally, and the large quantities of ground taken away by the old workers, we hope to be in a position after the mine is cleared to the bottom (which will take from six to eight months) to make some good returns of tin, and have no doubt the time is not far distant when large and profitable returns will be made. At the same time some alterations are wanted to be made in the pitwork, and also a new boiler will be required; the cost will be about 2500£.

TRELOWY.—T. Richards, Aug. 3: In sinking Cole's engine-shaft, below the 134 a part of the lode is fallen into the north side of the shaft, being 3 ft. wide, of a softer character than we have met with before (towards the bottom of the mine), composed of friable quartz and flookan; until more is sunk upon it the result remains to be proved; at the

same time, we consider it likely to be favourable for copper ore. The lode in the shaft is at present worth 15½ per fm. In driving the 134 end east a large vug has been met with, which makes the ground easier, and the end is worth 15½ per fm. In the 134 and west the ground is not so hard, whilst the lode contains more copper ore, and the general appearance of the end indicates a change for the better. In the sump-winze, sinking below the 134, the lode is worth 35½ per fm. In the winze sinking below the 124, west of Cole's, the lode is worth 20½ per fm., and much easier for sinking; this winze is nearly 4 fms. below the level. In the 122 end, west of engine-shaft, the lode is worth 12½ per fathom, and much improved in the general character of the lode. The 124 end east contains copper ore, but not of much value. The slopes continue of just the same value.

TRENCROM.—R. Hollow, F. Bennetts, Aug. 7: In the 100, east of Giesler's engine-shaft, the lode is worth 3½ per fm.; the men are fixing the skip-road from the 90 to the 100 fm. level, when this is completed they will drive the 100 west. In the 90, east of the engine-shaft, the lode is worth 3½ per fm. In the 80, east of the engine-shaft, the lode is worth 3½ per fm. In the 60 fathom level cross-cuts, north and south, east of the engine-shaft, there is no change to notice. In the 40, east of the engine-shaft, the lode is worth 2½ per fm. In the 30, east of the engine-shaft, the lode is unproductive; there are about 2 fms. to drive to get under Hollow's shaft. Hollow's shaft is sunk below the 10 fathom level 18 fms.; the lode is unproductive. At Mitchell's flat-road shaft, sinking below the 20 fathom level, the lode is not to value. In the 20, east of the flat-road shaft, the lode is worth 4½ per fathom.

TRESELYN AND SCADDICK.—J. Spargo, Aug. 7: I have this day sent you a box of tin broken from the lode very near the surface. You will see that such a sample of tin is rarely to be seen, even in the best tin mines in Cornwall, and at present it appears to be improving as we sink on its course; it is now about 3 ft. wide, all of which is splendid work. But there is a leader of tin on the inner footwall of the lode 6 feet wide, equal to the best I send you, and, judging from the appearance of the rock it is found in, I have no reason to doubt its continuance in depth. The lode in the deep, at the Scaddick, is now 1 ft. 6 in. wide, good work for tin. The lode in the driving towards the old tin shaft is also producing some good work, and we shall soon ventilate the bottom of the tin shaft, where there is a rich lode of tin gone down, that will pay well for stopping.—P.S. I shall be able to send you a cheering report for the meeting on Tuesday.

TREVENEN AND TREMENEER.—J. Webb, Aug. 8: Since last report we have cleared the 170 fm. (or bottom) level 8 fms. west of engine-shaft, which is the extent of the level. The lode here, where left off by the old workers, is 1½ ft. wide, worth 12½ per fm. for tin. We have now to drive 10 fms. stent, at 4½ per fm.; when we stop the back it can be done at 35½ per fm.; judging from what is left off at this point, it looks well; for the bottom, east of our present engine-shaft, as the best tin ground is all further east, which we are now clearing, and shall be able in a short time to operate on the lode there also. The 150 is being pushed west, to reach whole ground westward. The slopes in the back of the 140 west are rather improved, and offer encouraging features for sending back the deeper levels under it. The general prospects of the mine are very satisfactory, and we shall have the pleasure of reporting good results shortly.

TREWEATHA.—T. Foot, J. Scoble, Aug. 5: During the past month we have divided and cased the shaft from the 15 to the 20, cut top-pit, and driven west at the 30 fm. level 10 ft. The ground is favourable for progress; we expect to reach the lode in about 8 fms. driving. The 15 south has been extended 5 fms. 1 ft.; the lode in the end is 3 ft. wide, composed of gossan, spar, and lead—saving work. We have commenced stoping in this level; the lode is at present worth 3 cwt. of lead per fm. We have 3 tons of ore dressed and undressed at surface. The water in the old mine has not sunk anything during the month, being 6 ft. under the 20.

TRUMPET UNITED.—G. R. Odgers, Aug. 8: The engine-shaft to sink below the 15 by eight men, at 12½ per fm.; lode worth for tin 8½ per fm., and improving; the ground getting easier, which is a favourable symptom. The slope in back of the 15 east, to two men, at 12½ per fm.; lode worth about 2½ per fm. The winze below this level, to four men, at 2½ per fm.; lode worth 2½ per fm. The 15 west, to four men, at 6½ per fm.; lode worth 2½ per fm.; this is about 17 fms. east of a small clay cross-course, hence we are expecting an improvement. The flat-road shaft to six men, at 15½ per fm.; lode nearly 18 inches wide, yielding a little tin. All the landing for one month, at 3½ per fm. The Smith's work, with all the screwing, to two men, at 6½ per fm. The carpenters work at 50s. per month. I think, on the whole, the mine is looking more promising.

UNITED MINES (Trevistock).—J. Tucker, Aug. 7: The shaft is 10 fms. below the 60; the ground good for progress, and congenial for the production of mineral. The lode here, the eastern end, is producing fine stones of tin; it is about 2 feet wide, altogether very promising lode for tin stuff work. The lode in the winze is still in a disordered state, worth about 8½ per fathom. We have still a full supply of water for all surface purposes.

WENTNOR (Pantasa).—T. Pierce, Aug. 8: Grosvener shaft is without alteration, so also is the ore in the 64; this ground is, however, easier to cut; it forms a regular vein, about 12 in. wide, with two walls, well defined, between which is the ore embedded in clay and soft limestone; the bottom of the sink looks favourable for still further improvement. At the new shaft we are hindered by surface water, for as yet we have no swallow here to take it away.

WEST BASSET.—Wm. Roberts, Aug. 7: In the 114, west of Percy's shaft, the lode is 3 ft. wide, with stones of good saving work; the same will apply to the lode in the 104 west. In the 84 west the lode is 2 ft. wide, producing 1 ton of ore per fm. In the winze sinking under the 75 the lode is 2 ft. wide—tribute ground. The lode in the 65 west is 3 ft. wide, at present unproductive. In the 52 west the lode is 2 ft. wide, with stones of ore occasionally; tribute ground.—Caunter Lode: In the 114 east the lode is 1 ft. wide, producing stones of ore.

WEST DEVON CONSOLS.—Capt. Rowe, Aug. 8: At the south lode, engine-shaft, the timber work is complete in the whin department in good condition to enable us to draw the stuff from the present bottom. The drive of the 40 east is resumed by a full crew of men, at 7½ per fm. stent; 2 ft. wide, carrying 60 ft. wide within timber; no time will be lost in prosecuting this desirable point of operation with all possible vigour to arrive at the ore ground. The lode in the present end is 10 inches wide, producing very strong munda, thickly impregnated with good quality yellow copper ore, looking exceedingly kindly.

WEST FOWEY CONSOLS.—F. Puckey, E. Dunstan, August 5: There are no alterations to notice since our last report, except in the 125, east of Puckey's north shaft, where the lode is improved, and now worth 20½ per fm. for tin.

WEST PAR.—J. Webb, Aug. 8: Chalmers's shaft is sunk and timbered 6 fms. below surface. The adit end is still being driven north by two men. We are expecting the new shaft to cover and bottom here to-morrow, when the engineers will put the engine in order.

WEST SHARP TOR.—W. Richards, August 5: The part of the lode now being cut into in the cross-cut in the 150 is composed of quartz, iron, peach, and capel, with spots of grey copper ore occasionally. The ground in Morris's shaft is much the same for progress as when reported on last week.

WEST WENDRON CONSOLS.—R. Kendall, J. Hore, Aug. 3: The engine-shaft to sink below the adit, by nine men, at 18½ per fm.; lode small, yielding a little tin. The flat-road shaft to sink below the adit, by nine men, at 9½ per fm.; we expect this shaft will meet the lode 10 or 12 fms. below the adit. There are three men and one boy clearing the adit east of the flat-road shaft, at 80s. per fm.; there are two men and one boy driving the adit behind the Smith's shaft, at 80s. per fm.; this month we expect to come into the old workings. There are two men and two boys driving the adit from the south part of the sett, at 80s. per fm.

WEST WHEEL JANE.—J. Tonkin, J. Smith, Aug. 3: In the 70 west the lode continues large, and producing a little tin, but not of much value at present. In the 50 west, now about 8 fms. from Jones's shaft, the lode produces 12½ worth of tinstuff per fathom. In the 30 west the lode is 4 ft. wide, worth 12½ per fm. for tin, and producing 3 tons of munda per fm. In the 10, east of Painter's shaft, the lode is 9 ft. wide, worth 20½ per fm. for tin; in the 10, west of this shaft, the lode is 9 ft. wide, worth 16½ per fm. for tin, and producing 2 tons of munda per fm. We shall have 5000 sacks of tinstuff for sale on Thursday next, about the usual value, from the tributers alone. We have from 1500 to 2000 sacks of tinstuff from the tutwork, which we have not sampled. We hope our stamps, after we have set twelve heads more to work, will stamp the greater part of our munda stuff.

WEST WHEEL MARGARET.—Wm. White, Aug. 6: At Hallett's shaft the lode seems gradually resuming its regular course; it is now 12 in. wide, producing a little tin, but not enough to value.

WEST WHEEL PROVIDENCE.—John Thomas, Aug. 4: The works are progressing favourably without any important change. In the 60, driving west, at 6½ per fm., the lode is large, containing a little copper; but not to value at present. The pitchers are working at 50s. per fm. The 60 is worth 6d. to 18s. 4d. in 17.

WEST WHEEL TREVELYAN.—Aug. 3: In the 58, driving east of Cater's engine-shaft, there has been no lode taken down this week. In the 48 west the lode is improved, with a good branch of ore on the south part of the lode. In the slopes in the back of the said level there has been no lode taken down since last report. All other parts of the mine are much as last reported.

WHEEL AGAR.—W. Roberts, Aug. 7: In the 80 east the lode is 4 ft. wide, producing 2 tons of good ore per fm.; in the same level west the lode is 2 ft. wide, producing nearly 1 ton of ore per fm. In the winze sinking under the 80 no lode has been taken down. The lode in the 40 west is 4 ft. wide, producing occasional stones of ore. In the 60 west the lode is 2½ ft. wide—tribute ground. Other operations are progressing favourably.

WHEEL ALTHUR.—T. Carpenter, Aug. 6: We are making good progress in driving the 50 east; we have driven this level east of boundary cross-course 18 fms. 4 ft., and according to measurement in the 35, where we have seen both cross-courses, we have 5½ more to get in over Hooper's rise to make the communication; the lode in this end is 3 ft. wide, composed principally of munda and stones of copper ore. Hooper's rise, in back of the adit west, is 12 fms. 3 ft. I expect we have 8 ft. further to rise to reach the bottom of the 50, which I hope will be accomplished very soon, as the men can hear each other very distinctly. Barley's and Palmer's slopes, in back of the adit west, are just as last reported, yielding 1½ ton of ore per fm. each slope.

WHEEL CONCORD.—Capt. Luke, Aug. 6: We are now getting up the capstan and shears as fast as we can; the lode looks very well, and the following assay has been made of the ore:—Wheat Concord Mine, Tinstock.—Sample assayed for lead and silver, 153½ in 200 lb: 15 oz. of silver in 1 ton of ore.—JAMES HARVEY.

WHEEL CREBOR.—Capt. Gifford, Aug. 8: In the 60, east of Cox's shaft, the lode is 2 feet wide, producing good stones of copper, and appears best in the bottom of the level. In the 60, west of Cox's shaft, no change since last week. In the 48 cross-cut north, east of Cox's shaft, a little water is coming from the end; no other change. In the 48, west of Cox's shaft, the lode is 18 in. wide, yielding stones of munda and copper ore, but not to value.

WHEEL CUPID.—R. Pryor, sen., Aug. 2: Setting Report: The 54, to drive east of the engine-shaft, by six men, at 37½ per fathom, where the lode is 2 ft. wide, composed of gossan, peach, munda, and prlan, with a little black and grey copper ore intermixed. The 40, to drive east of this shaft, by six men, at 27½ per fm., on a lode 3 ft. wide, composed principally of a fine-looking gossan, with a little grey and yellow copper ore, of a most promising character. These two levels can now be pushed on to reach the cross-course with all speed, as the rise in the back of the 54 is communicated to the 40, and has given good ventilation.

WHEEL DAMSEL.—R. Pryor, H. Harvey, August 3: We have cleared the 50, on Skewes's flookan, south of the engine-shaft, 21 fms., and still find it to be full of stuff. The 50, east of Fox's shaft, is cleared within 6 fms. of Hodge's flookan, where we find an old wall broken down from the back of the level; the clearing of this shall be pushed on with all speed, in order to reach Tremayne's lode, where we purpose driving this level east on the same. The 40 fm. level cross-cut is driven south of King's shaft about 16 fms.; at this point we have cut another branch, which has made the ground a little harder for the time, but are daily expecting a change for the better. No time shall be lost in carrying out these points to intersect the south lodes in our sett, and when accomplished, together with the clearing of the old engine-shaft, which can be done with ease from the 27 to the 50, we do not hesitate to say it will open a good and testing mine.

WHEEL EDWARD.—M. H. East, Aug. 9: In the 81 west we have cut through the south lode; it is about 3½ ft. wide, and shows an improvement, worth 1½ ton per fm. The lode is letting out a quantity of water, which is strongly mineralised. In the 71 west the lode at present is a little disordered by the influence of a small slide; the lode at present is worth about 3 tons of ore per fm. We have suspended the 61 west for the time, and put the men to sink the new winze, which will be pushed down to the 71 as quick as possible. The lode in the winze is worth 8 tons of ore per fm. for the length of winze, 8 ft. In the 50 west the lode at present is disordered by a hard capel, but I think we are getting through it, and a change for the better may be expected in a short time. In the 61 east we are driving by the side of the lode, and the ground is good for

progress. In the 40 east the lode has a little improved, and is worth 1 ton of ore per fathom. The lode in the slope in back of this level is worth about 2 tons of ore per fm. This ground will pay best for working on tribute, therefore we intend to suspend stoping, and put the same men to commence a new rise in back of the 71 west, in order to communicate the 71 with the 61 as soon as possible, so that as little time as possible may be delayed in driving the ends westward. The lode in the slope below the 40 east, east of No. 2 winze, is still a good course of ore, worth 4 tons per fm.—North Lode: In the boundary cross-cut north the ground at present is not so easy for opening as formerly, but it is still very favourable for progress. It is desirable that this point should be prosecuted with vigour, and Wheel Arthurburg will supply two men to assist as soon as they have communicated with the 50, on the south lode. In the 25 fm. level west there is no change worthy notice.

WHEEL GRENVILLE.—G. R. Odgers, W. Bennetts, Aug. 3: No lode has been taken down in the engine-shaft. We shall shortly be at the 110, when we shall prove the lode that is standing on the south side. At the 100 east the men have been engaged putting in air-pipes, after which we shall cut in south, from whence there is a very large stream of water flowing. The lode in the rise above the 100 east is 18 in. wide, of gossan and quartz, with occasional stones of ore—looking kindly. The lode in the 90 west is 10 in. wide, of quartz, with munda, and spots of yellow ore. The lode in the winze below this level is 18 in. wide, of peach, &c., with good stones of ore—a kindly lode. In the 80 cross-cut north we have an elvan, and as there is an elvan to the south of the lode at East Wheel Grenville, it looks favourable for the lode being before us. The tribute pitches are looking much the same as for some time past.

WHEEL HARRIETT.—S. Williams, Aug. 3: The lode in the 118, east end, is 1 foot wide, producing stones of copper ore. The lode in the slope below the 100 is worth for tin 40½ per fm. The lode in the 100 end east is 1½ foot wide, producing 6 cwt. of tin per fm. Other parts of the mine are without change to notice.

WHEEL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, Aug. 8: The lode in the 170, north of Polard's shaft, is 2 feet wide, and worth 4½ per fm.; in the same level south it is 3 feet wide, and worth 6½ per fm. In the 160 north the lode is 2 feet wide, and worth 4½ per fm.; in the same level south it is 3 feet wide, and worth 7½ per fm. The 150 north is as last reported; in the same level, south of Clymo's shaft, the lode is 3½ feet wide, and worth 6½ per fm. There is nothing new in the 110, south of the slide. Clymo's shaftmen are still engaged in cutting a trip-pit in the 160. The slopes and pitches are producing much the same as they have for some time past.

WHEEL NORRIS.—J. A. Sance, J. Andrews, Aug. 8: The sinking of the Gressmoor engine-shaft has been hindered this week in consequence of having intersected some very soft ground in the 15 fm. level cross-cut south, and we have been obliged to employ the shaftmen to assist in the securing of it; we hope to get through the difficult soft ground in a day or two. No doubt we have got near a large lode, which accounts for the great influx of water being forced through the soft ground lying on the north side of the lode. In the 15 cross-cut north we have just cut into No. 3 lode about 15 in.; it will take a few days more to ascertain its size and character; so far as we have been able to see it the composition is capel and peach, with a branch of flookan in the footwall of it, which we had the advantage in driving on its course. Carter's engine-shaft is sinking very satisfactorily, and we expect it will be got as deep as the 15 fm. level within the time mentioned in last report. In the past week we have been extending the adit level east on No. 6 lode; we find that the ancient miners have wrought out the main part of the said lode above the adit level, but we find a branch, 4 in. wide, left in the footwall, of good quality tinstuff, and we infer that the ancient miners must have had a good course of tin in this place, and we anticipate that there is a good lode left in the bottom below their workings, but we cannot do anything below the adit before Carter's shaft is sunk to the 15, and the lode drained by a cross-cut intersecting the lode, as there are so many excavations made on the lode above the adit to the surface that the rain water finds its way to the adit at once. We have named the lode cut in the cross-cut 26 fms. north of Carter's shaft Vivian's lode, as it resembles the lode called by that name in Craddock Moor and West Caradon Mines, and corresponds also in its bearing, and the underlie being nearly perpendicular; this lode in the adit end, driving west on its course, is about 2 ft. wide, composed of quartz, peach, prlan, and oxide of iron, containing a little tin, with walls well defined, and showing a strong, kindly character. There is no material alteration in any other part of the mine since last report.

WHEEL PROSPIDNICK.—R. Kendall, Aug. 3: Wilson's shaft is about 22 ft. below the 10; the lode is much the same. Watson's shaft is sunk 3 ft. this week; the lode is not taken down. The 12 east and the back are working on tribute, and we think the men will make very good work.

WHEEL RICHLY.—J. Symons, Aug. 7: The whin-shaft is below surface 8½ fms.; lode 2 feet wide; the leader part is 12 in. wide, composed of white iron, prlan, and lead—a kindly lode; this lode looks promising to make something good in depth. The 17 end, north of cross-cut, is in about 36 fms.; the lode is still split by a horse of killias; the leader part is 12 inches wide, composed of white iron, prlan, and good stones of lead. In a short drive more I expect these parts will unite, when something good may be expected. The wheel and pitwork are in good working order.

WELSH RAILWAYS.

The Royal Assent has been given to several Welsh railway bills. The most important are—The Swansea and Neath, the Swansea Valley, the Pontardulais and Swansea, the Carmarthen and Llandilo, and the Devil's Bridge and Aberystwith lines, which are all connected with the mineral traffic of South Wales. The question now asked is, when will they be made, if the money market continue so tight as it is at present, and it is likely to do so for some time to come? Much depends upon the requirements of the district and the amount of local support given to the undertakings. We expect the Swansea and Neath, and the Pontardulais and Swansea lines will be commenced at once—that is, so soon as the preliminary arrangements are completed, because they have received subscriptions to a considerable amount, and have the support of the mining and shipping interests centered in Swansea, which is undoubtedly the most rapidly rising port in Wales. The works upon these two lines will not, from the nature of things, be delayed; besides, the directors promise to go on with spirit as soon as possible.

We wish we could use similar language in reference to the other lines which are also intimately connected with the industrial prosperity of the country. The Carmarthen and Llandilo line will, we fear, hang in suspense for a very long while, notwithstanding the promise of the directors to finish it by next Christmas twelve months. It has not had any extensive monetary assistance in the locality, not because the inhabitants are unconcerned in it so much as from the comparative poverty of the country, which is at present almost purely agricultural (although prospectively mining), and the inefficient means used to obtain shareholders. Saturday is the market day in the principal towns, and we believe that was the only occasion upon which the tradesmen of these towns—or, at least, one of them—were canvassed. A more inappropriate day could not have been selected, and, as a matter of course, the effect was unsuccessful, or nearly so. There was also a dispute as to the terms of agreement, which might easily have been arranged. We know several tradesmen who are prepared to take shares if waited upon. Why not hold public meetings, and in a business-like manner solicit subscriptions, as was long since suggested? The reality of public sympathy with the line would then be proved beyond doubt, and if the inhabitants, who are directly interested in it, do not liberally subscribe they must not complain of any neglect on the part of the immediate promoters of the undertaking. We might almost say the same of the Devil's Bridge and Aberystwith branch of the Manchester and Milford Haven line, which is in truth mainly intended for the mineral traffic of the Rheol. At the rate of the progress observed in the construction of the main line the next generation will barely witness its completion.

The Carmarthen and Cardigan Railway, from the Myrtle Hill station of the South Wales line to Conwil, will be reopened for traffic on Monday next. It was rumored that the company intended to work separate from the South Wales—that is, to have no working arrangements with them. The impolicy of such a course was so obvious that it was thought the directors were under the pressure of some influence opposed to the best interests of the line, and arrangements which had been made for lime and coal from certain depots, to the exclusion of all others, gave a decided colouring to the representations which were aloft. We are, however, glad to state that the directors have made arrangements with the South Wales Company, and the traffic will be through for passengers and goods.

THE MINERAL WEALTH OF SOUTH WALES.—No IV.
THE LLYWYCALENIG MINES.

In selecting mines for discussion, we do not submit to any geographical order, but take them up from time to time as it suits our purpose. Indeed, it would be tedious to go minutely into all the trials for ore outside the purely mining districts of Wales; and it will answer all practical ends to notice only those which were made with fair prospects of success. We shall, therefore, go direct from Merlins Hill and Pantyglen to Llywycalenig, passing over unobserved a great many trial pits and adits, which may at some future time engage our attention. Llywycalenig is marked on the Ordnance Map about five miles north of Carmarthen, and not far from the old village of Llanpumpaint, where it is proposed shortly to erect a station on the Carmarthen and Cardigan Railway, which runs through the village. It is best reached over the Lampeter road. The whole district is highly mineralised, and very close observation is not required to detect numerous indications of ore where the rocks are precipitous and bare, or where stones are quarried for agricultural operations or building purposes. We may here state that the Silurian formation of Murchison extends without interruption from Carmarthen to Cardigan Bay, and is for the most part composed of argillaceous slate, with frequent bands of grit and sandstone. If we take a large map it will be easy to trace the strata, and by also using the sections of the Geological Survey we shall find that the mineral-bearing rocks in the north-east and the south-west crop at Llywycalenig. We say mineral-bearing, for it is known that from the time of the Romans to the present day mining in Wales has been profitable, generally speaking, only in argillaceous rocks. This is not the place to enter upon the interesting subject here alluded to; if it were we should have no difficulty in supporting the assertion we must now assume. The map will at once suggest several mines on the strike of the same strata as that at Llywycalenig (we mean the same geological plane), while the sections will show the geological relation they bear to the zones of ore-producing clay-slate in Cardiganshire. But, apart from these facts, we repeat that the mineral aspect of Llywycalenig, if we may use the expression, cannot fail to strike any one who has the slightest knowledge of mining. At first sight it appears to be a spur of the Altivyall range of hills, or, perhaps, more properly speaking one of the group constituting the range, which resembles a host of huge raths or Roman fortifications. These hills are fractured and traversed in every direction by picturesque valleys, or *cwm*, as they are commonly designated in Wales; and hence the frequent outcrop of lodes and the facilities presented for economical mining operations.

A little more than 12 months ago we visited Llywycalenig, on a geological excursion, and our attention was arrested by the strong mineral features of the country, which reminded us of some of our more profitable mining districts. There is great reluctance on the part of the peasantry and small farmers to assist the explorer, and our enquiries in this, as in many other parts of Wales, were met with a blank expression of countenance, and the invariable reply—"There is no mwy'n hira, that I know of." We, however, persevered, and were at last directed to Mr. Davies, the intelligent proprietor of Llywycalenig, who very readily took us over his property, and without hesitation supplied us with all the information we required. In a quarry just below his residence, which he opened many years since for the purpose of producing stone to drain so-called land, he discovered a side running transversely, carrying what he described as decomposed stone, and a kind of heavy ironstone, from 1 to 2 in. in diameter. He cracked these hard stones, and found in them particles of sulphide of lead and copper. He could not well be mistaken in the galena, and as a test for copper he placed some iron in a stream of water issuing from the slide, and in two days, he assured us, it was discoloured by a precipitate of copper, which he proved by removing it with paper, which in burning gave a strong copper reaction. He subsequently drained some land near the quarry, and in excavating the necessary trenches he found large quantities of angular pieces of rock, carrying lead and copper. These facts induced him to conjecture the presence of a large body of ore, not far from the surface; and by way of further trial he directed a man to cut a trench up to a spring of water forcing its way from the side of the hill. By this means he discovered a quantity of loose and highly crystallised quartz and carbonate of lime in two distinct and well-defined lodes, running respectively north and south and east and west. Having thus satisfied his curiosity, he did not proceed any further until the year 1858, when he drove about 10 fms. on the north and south lode, and succeeded in breaking lead ore, although the bank is not more than from 12 to 14 feet. The lead, not in quantity, was in a matrix of fine conchoidal blue clay. He also sunk a trial shaft about 5 fms. on the east and west lode, which on the surface was 2 ft. wide, and composed of kindly spar, gossan, and flint. The lode gradually widened in depth, and in 5 fms. is more than 3 ft., and greatly improved in character.

These statements were made to us by Mr. Davies, and may be relied upon. We saw the adit and shaft, but could not inspect them, as they were full of water. The stuff at surface was highly mineralised, and confirmed Mr. Davies's representations in every respect. We have now before us some clay-slate, with iron pyrites and specks of sulphide of lead, from these lodes, and also some very kindly spar, chiefly carbonate of lime and quartz, with a nice rich rough gossan. If Mr. Davies be at all mistaken, it may be as to the presence of copper in the lode, although he speaks positively on the point; but we must add that the pyrites we have seen are all iron. Still that is of very little importance, as the lodes probably carry lead and not copper. All these mines require is a fair trial; they have not yet been meddled with by any company, Mr. Davies having made all the trials described by him for his own gratification, and at long intervals of time. He talks of sinking a little deeper after the harvest, but would it not be worth the while of some of our large mining interests to develop these mines, which they might lease upon easy terms, and work at a trifling expense, if placed under the management of an agent who knows the country well, and who is influenced by the admitted principles of science, as well as the teachings of experience? We have no personal interest in the matter, but being anxious to develop the untried mineral districts of Wales, we should be glad to supply information respecting these or any other mines in the country.

MINING IN THE DEVON GREAT CONSOLS DISTRICT.—That the rich lodes which have returned such enormous dividends to the proprietors of the Devon Great Consols Mines should be confined to the precise boundaries of their sett is a circumstance which can scarcely be supposed to exist, and the prospect of adjoining properties proving equally remunerative to the shareholders is certainly all that can be desired. The mine in question is immediately between the Devon Great Consols, the value of which is too well known to require comment, and the Great Wheal Martha, from which a large quantity of ore has recently been sold. The company for working the EAST WHEAL MARTHA sett has been formed on the limited liability principle, with a capital of 15,000l., in shares of 2l. 10s. each, and as the promoters are to receive only 7500l. for the transfer of the property (which 6250l. is in the shape of paid-up shares, and the remaining 1000l. subject to return to the company out of dues), there will remain 7500l. for working the mine, a sum which it is estimated is considerably more than will be required. Capt. Joseph Richards, one of the underground agents of Devon Great Consols, reports most favourably upon the property, and asserts that the sett contains, in addition to the lodes of Devon Great Consols and Great Wheal Martha, "several other lodes of very great promise." The company claims the advantage of all the former adventurers' experience, whose failure is attributed to sinking too far south to cut the Devon Great Consols lode.

IRON AND COAL MINING IN GLAMORGANSHIRE.—In another column we publish an advertisement for a partner, with capital, in an iron and coal works in the Bridgend district, the profits of which are estimated at nearly 30,000l. per annum.

It is calculated that the two furnaces turn out iron (1200 per month) at 35s. per ton, which is saleable at 34l., and that on the monthly sale of 10,000 tons of coal the profit is equal to 1500l. A large profit may, it is presumed, be realised even in the present depressed state of trade, and as soon as former activity revives the percentage returned upon the investment will, of course, be enormous.

GERMAN MINING CONFERENCE.—The second general assembly of miners and smelters, appointed at the May meeting of 1860 to be held in the autumn of 1861, is now fixed for the last week in September—the opening taking place on Monday, Sept. 23, and the dissolution Sept. 29. The subscription will remain as at the first conference, 5 fl. C. M., equal to 10s. sterling. The committee will be glad to learn before September 20 the names of those gentlemen intending to be present at the meeting. In the event of it being intended to exhibit mining products, drawings, models, machines, tools, scientific apparatus, &c., the space required must be stated, at the latest, by Sept. 15; and it is to be understood that the exhibitor pays carriage both to and from the place of exhibition. All communications must be addressed to—"An das Comité der allgemeinen Versammlung von Berg- und Hüttenmännern, zu Händen der Redaktion der Oest. Zeitschrift für Berg- und Hüttenwesen, Buchhandlung Friedrich Manz in Wien, Kohlmarkt Nr. 1149."—*Berg Geist.*

At the Paris Academy of Sciences, M. Ste. Claire-Deville presented several specimens of beautiful crystallisations of metallic oxides, obtained by contact with gaseous hydrochloric acid; and especially called attention to the crystals of protoxide of manganese, of an emerald blue, an adamantine brilliancy, and of considerable power of refraction.

The COMPRESSED COAL COMPANY commenced the allotment of their shares yesterday, and we understand that the subscription list is very nearly filled. The London works are forthwith to be erected, and it is anticipated that in about two months the company will be in full working order. The advantage claimed for this company's fuel over every other description of artificial fuel is that it contains nothing but pure coal. In all others—such as Warlich's, Wood's, &c.—there is a large admixture of foreign matter, in the shape of pitch, tar, and other similar substances, to which much serious objection has been raised. Upon these grounds it is confidently believed that the Compressed Coal Company's fuel will find a more ready market than any other description of artificial fuel.

COLLIERY ON FIRE.—On Wednesday a fearful accident occurred at Summerlee Colliery, near Hamilton, by which the lives of a large number of men are jeopardised. It appears that the shaft is divided so as to serve for upcast and downcast, a "cube," or furnace, being provided on one side of the bratticing to produce the current of air through the workings. From some unknown cause the cube became overheated, and ignited the lining of the shaft, when in less than ten minutes all access with the men in the pit was cut off. On the morning of the accident about 45 men and a number of boys employed as drawers descended the pit, and all went on well until one o'clock in the afternoon, when the bratticing took fire, and speedily reduced the bratticing and head-gear to cinders. After three hours' continued exertions, and with the aid of various engines, the fire was sufficiently subdued to enable a rope to be lowered, which some of the men succeeded in fastening round their bodies, and were so raised. Temporary pulleys were quickly erected, and a hatch lowered, in which the miners last exhausted managed to take a place, and one by one were brought to surface. By seven o'clock 13 had been thus raised, when a brave fellow—Andrew Hunter—an ironstone miner, volunteered to descend into the suffocating atmosphere to render his assistance to those who were too weak to fix themselves in the hatches. After Hunter had been down some time he signalled to be raised, and stated that in the dark, and without assistance, he could do nothing, but with lamps and assistance he would go down again. Lamps being procured, Hunter and Fleming descended, and after sending up several helpless miners were themselves raised in a fainting condition. Other volunteers were now found, and by half-past nine 28 had been rescued, one only—Macedon Nelson—having expired. As the evening advanced nearly all the men brought up were insensible. A worthy act on the part of Mr. W. G. Simpson (Dundas, Simpson, and Co.), whose works adjoin the Summerlee Company's, should not be permitted to pass unnoticed. As soon as the occurrence of the accident was known he hastened to give directions to drive a mine through from his workings into the waste of the Summerlee Pit—a distance of 60 yards—in order that in the event of the charged bratticing choking the bottom of the shaft another means of egress might be provided.

COLLIERY EXPLOSIONS.—RESPONSIBILITIES OF COALOWNERS AND PITMEN.—At the Dumbarton Small Debt Court a case of some importance, both to coalowners and colliers, was heard, wherein Martin Oliver, a miner, sought to recover 12l. damages for injuries he sustained through an explosion of fire-damp in May last. The miner contended that the cause of the explosion was that one of the drawers had left a trap-door open, whilst the owner declared that the means of ventilation were perfect, and in good order, and that on the morning of the accident the pit was carefully examined and found to be in a safe condition. In the forenoon the presence of fire-damp was detected, the workmen were warned, and the fireman sent for. The miner injured carefully continued to work with his naked lamp, though others had put theirs out, and the explosion occurred before the fireman reached the spot. All the witnesses admitted that the ventilation was good, and the sheriff found, that although a remote cause of the accident might have been the leaving of a trap-door open, the proximate or immediate cause of the accident was the pursuer's own lamp, and the pursuer had improperly remained at work, with the lamp burning, after he had admittedly received intimation of the presence of fire-damp, not only contrary to the rules of the pit, but contrary to all prudence.

EXTRAORDINARY VERDICT.—On Tuesday, an inquest was held at St. Helen's, on the body of James Dugdale, a fireman, who was killed on the previous day at Messrs. Pilkington's colliery, Sutton, in consequence of being lowered into the "dip well," which contained several feet of water, by the negligence of the engineer, Thomas Golding, who had not opened the throttle-valves when the deceased signalled to ascend. The jury returned the following verdict:—"Censurable mistake. Drowned in the pit by the negligence of the engine-driver running the engine the wrong way." The coroner will decide whether the verdict is equivalent to one of manslaughter.

For more than ten years the RAILWAY PASSENGERS' ASSURANCE COMPANY has enjoyed a reputation for integrity and liberality which has secured it a large amount of public support, and we much regret that they should have been concerned in a case which, having been decided against them, cannot fail to very materially affect the character of their policies for indisputability, unless it be clearly shown that the company had good ground for believing that an attempt was being made to defraud them. At the Wells Assizes, on Thursday, Mr. Justice Byles heard a case in which the widow and administratrix of Mr. John Hutson, a Somersetshire farmer, who had insured against accident in the Railway Passengers' Assurance Company, sought to recover the amount insured, the company refusing to pay on the ground that Mr. Hutson did not die from the effects of accident, but from his own wilful act in exposing himself to unnecessary danger, or while he was in a state of intoxication. Originally the company's business was confined to railway accidents, but it has since been extended to accidents of all classes, which doubtless has caused a large amount of difficulty to be met with in determining what deaths were accidental and what otherwise; and, inasmuch as enormous benefits are offered for extremely small premiums, it follows that it would be ruinous to pay claims without the most careful enquiry. In the present instance the insured had been dining out; but from the evidence it appeared that although he had been drinking cider, and one or two glasses of ale, he was not intoxicated. Although inasmuch as the verdict of the coroner's jury was to the effect that the deceased was "found dead in the Rhyne, and that by some means unknown to the jury he had fallen into the Rhyne, and in the water thereof became drowned and was suffocated, of which he died," upon a *post mortem* examination there were not any evidences of drunkenness. At first sight the repudiation of the claim by the company may appear unjustifiable, but when we consider that the body of the deceased was found five miles from any point upon which he would have been expected to be found in reaching his home, the necessity for at least contesting the question will be at once apparent. The verdict of the jury—1000l. damages, 9l. interest, and costs—will doubtless fall heavily upon the company; but the proof which the verdict affords to the public, that they are well protected against frivolous objections, is sufficient to give others confidence in insuring, whilst the extraordinary circumstances connected with the case will convince all impartial observers that the directors would not have been acting fairly towards the shareholders in the company had they paid the claim without questioning it.

EXPORT OF RAILWAY MATERIALS TO INDIA.—The activity which prevailed last year in various branches of the iron trade is to some extent explained by the immense shipments made of material to India, on account of the vast railway works now in progress. It appears from an official return that last year no less than 284,710 tons of materials were dispatched to India, of the collective value of 2,140,703l., being the largest consignment made in any one year since the works were commenced.

From British Columbia the mining intelligence is very favourable. New rich and extensive diggings have been discovered lately, and the miners are reported as earning largely. About \$125,000 in value of gold dust has come down to Victoria, besides what was carried by miners on their persons, within the last ten days.

The Artesian well at Columbus, Ohio, has reached the depth of 2339 ft. 10 in., 4 ft. 2 in. deeper than any other well in the world. It now only lacks 300 feet 1 in. of being half a mile deep.

VALUABLE LAND.—The North-Eastern Railway have had to pay Mr. Joshua Bower 4800l., with costs, for five acres of land at Harrogate, besides the advantages obtained by the railway passing through his estate.

DE ARRIETA'S CHAPAPOTE.—In the specification of this patent, just filed by Mr. Henry, the patent agent, Fleet-street, various applications of this important product are claimed. A mode of coating metal and other substances with oil and concrete chapapote for protecting and preserving them is especially referred to. Also a compound of chapapote with siliceous or other mineral matter well mixed therewith, and with or without oil, is proposed for various coating and covering purposes. A mode of employing slabs of chapapote with other matters for paving roads and other surfaces, and a method of resisting the rise of damp in houses, by the introduction of chapapote into the walls, are particularly described.

MOVING CARRIAGES ON RAILWAYS.—An apparatus, intended chiefly to be used at stations for moving carriages in the making up of trains, has been provisionally specified by Mr. T. V. Guérre, of L'Aigle. It consists of a frame placed on wheels running on the rails, provided with a platform for an attendant to stand on, and with a winch handle for giving motion to a worm or endless screw in gear with a worm wheel upon the axle of the railway wheels. The top of the frame engages in a hook on the carriage to be moved. The wheels may be roughed or jagged to give them a better hold on the rails, and the bite may be further secured by means of a rod carried from the top of the frame to an eccentric on the axle of the wheels.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, August 9, 1861.

COPPER.		£ s. d.	BRASS.		Per lb.
Best selected....	p. ton	95 0 0	Sheets.....	8 1/4-9 1/4	
Tough cake.....	"	93 0 0	Wire.....	3d.	
Tin.....	"	93 0 0	Tubes.....	10d.-10 1/4d.	
Burra Burra (nom.)	"	93 0 0	FOREIGN STEEL.		
Copiao.....	"	86 0 0-88 0 0	Swedish, in kegs (rolled)	14 10 0	
Copper wire.....	p. lb.	0 1 0	" (hammered).....	"	
ditto tubes.....	"	0 1 0 1/2	Do, in sagittos.....	15 10 0	
Sheathing & bolts.....	"	0 0 10 1/2	English, Spring.....	16 0 0-23 0	
Bottoms.....	"	0 0 11 1/2	Bessemer's, Engineers' Tool	44 0 0	
Old (Exchange).....	"	0 0 9	" Spindle.....	30 0 0	
IRON.			QUICKSILVER.....	7 0 0 p. bottle	
Bars, Welsh, in London.....	p. ton	6 5 0	SPELTEN.		
Do, to arrive.....	"	5 17 6	Foreign.....	17 0 0-17 10 0	
Nail rods.....	"	7 0 0	To arrive.....	18 5 0	
" Stafford, in London.....	"	7 0 0	ZINC.		
Bars, ditto.....	"	7 10 0-8 0 0	In sheets.....	22 0 0	
Hoops, ditto.....	"	8 10 0	TIN.		
Sheets, single.....	"	9 0 0-9 10 0	English, blocks.....	114 0 0	
Pig, No. 1, in Wales.....	"	3 0 0-4 0 0	Do, Bars (in barrels).....	115 0 0	
Refined metal, ditto.....	"	4 0 0-5 0 0	Do, Refused.....	116 0 0	
Bars, common, ditto.....	"	5 0 0	Banca.....	113 0 0-114 0 0	
Do, merchant, in Tees.....	"	6 10 0	Straits.....	110 0 0-111 0 0	
Do, railway, in Wales.....	"	5 0 0-5 2 6	TIN-PLATES.		
Do, Swed., in London.....	"	10 10 0-11 0 0	IC Charcoal, 1st qua. p. bx.	1 8 0-1 9 0	
To arrive.....	"	10 0 0-11 0 0	IX Ditto 1st quality.....	1 14 0-1 15 0	
Do, f.o.b. in Tees.....	"	2 0 0-2 10 0	IX Ditto 2d quality.....	1 4 0-1 6 0	
Ditto, forge, f.o.b. in Tees.....	"	3 10 0-3 12 6	IX Ditto 3d quality.....	1 1 0-1 12 0	
Staffordshire Forge Pig.....	"	3 10 0-3 12 6	IX Coke.....	1 1 6-1 2 6	
Welsh Forge Pig.....	"	3 10 0-3 12 6	IX Ditto.....	1 7 6-1 9 0	
LEAD.			Canada plates.....	p. ton 12 10 0-13 0 0	
English Pig.....	"	19 0 0-21 0 0	In London; 20s. less at the works.		
Ditto sheet.....	"	21 0 0-22 0 0	Yellow Metal Sheathing. p. lb.	8 1/4d.-9d.	
Ditto red lead.....	"	22 0 0	Indian Charcoal Pigs.....	6 12 6-6 15 0	
Ditto white.....	"	23 0 0-24 0 0	In London.....	6 12 6-6 15 0	
Ditto patent shot.....	"	23 0 0-24 0 0	At the works, 1s. to 1s. 6d. per box less.		
Spanish.....	"	18 0 0			

REMARKS.—The unfavourable intelligence received of the war in America is anything but conducive to the restoration of commerce with that country. Since the commencement of hostilities there our market, with little exception, has suffered extreme prostration, and consequently a great depreciation in the value of all metals. Although we cannot attribute the absence of the general demand entirely to the rebellious state of America, yet it is admitted that to this cause may be traced the principal depression; indeed, the interests of the English and American markets are so closely allied that there naturally exists a sympathetic feeling, and the changes that occur from time to time in either place exercise considerable influence one over the other; nevertheless, in face of the unfortunate turn of the war, which appears now as if it would be greatly prolonged, strange and contrary to all reasonable anticipations, it has scarcely made the least impression, and, most surprising, has not in any way checked or interfered with the speculative feeling that has been recently manifested. Under these circumstances, speculation is premature, and is not at a safe time. War is the curse of trade, and poverty and adversity attend it.

COPPER.—Underselling is now quite over, and the smelters are no longer sellers under fixed rates. Our market is very firm, and an advance may shortly ensue. Foreign has also participated in the improvement, and holders are less disposed to realise than hitherto. Burra Burra, 95l.; Kapunda, 94l.; Baltimore, 93l.; Spanish, 85l.; Chili, 85l. The standard has risen, and the tendency is still upwards.

IRON.—Orders continue very limited for all kinds, and prices are easy. The production is much diminished, and might be further reduced; it is the only way to maintain present rates while business is so dull. Merchant bars are easier to buy. Staffordshire is in limited demand. Scotch pigs are rather easier, mixed numbers having receded to 51s., 51s. 3d. cash.

LEAD.—English pig firm in price. Sales to some extent have been effected in ordinary soft quality. Spanish quoted at 18l.

SPELTEN.—Our market remains in much about the same position as for several weeks past, so far as the disposition of holders is concerned. There was as much disinclination to sell at 15l. 10s. as there appears to be at 17l. per ton. Whether the firmness of sellers will continue, and enable them to obtain still higher prices, has yet to be proved; but if the present rates will not induce the Germans to sell, then the market must inevitably rise higher than it has at present reached—in favour of which the raw material has risen. A strong demand exists for France, and the rates paid in Hamburg and Stettin bring prices here up to 18l. 5s.; of course, if this metal cannot be replaced in our market under so great a difference, it is not likely that importers will realise; but, on the other hand, should this French enquiry suddenly cease, the speculative feeling by which it is accompanied would very soon evaporate, and down would come prices with astonishing rapidity—perhaps faster than they have run up. Our market has reached a point which requires buyers to be cautious.

TIN.—English has been reduced this day 3l. per ton. Straits sold in several places at 111l. previous to the fall, and is not worth so much by 20s. per ton. Banca, nominal, 113l. to 114l.

TIN-PLATES.—IC coke can be bought freely at 21s. 6d.

STEEL.—Sellers of Swedish keg at 14l. 10s.

NEW YORK, JULY 26.—During the past month there has been a better feeling in business circles, and although speculation is checked during the last few days by the repulse of the United States forces, higher prices are fully maintained. There are as yet no reliable advices in regard to the Tariff Bill now pending before Congress.

Tin. There has been a good demand, and with few sellers prices have gradually advanced. The sales embrace 600 slabs Straits at 23c., 600 slabs at 24c., 100 slabs Malacca at 25c., and 700 to 800 slabs Banca at 26 1/2 c., all cash. To day we quote Straits 25c., Banca 26 1/2 c. The importations have been 7200 slabs Straits, at Boston and New York, equal to 44,530 slabs, with no shipments on the way from Europe or the East Indies. Of the Straits the bulk is not offered for sale for the present, as its cost is far above to-day's value, and holders look for a material rise with the revival of consumption. The latter has been very small for the last few months, and the following statement shows deliveries of only 3500 slabs a month. Neither dealers nor manufacturers, however, have any supply of consequence. The stocks on April 1 amounted to 42,800 slabs, imported since that date 16,820 slabs, equal to 59,620 slabs; exported 1300 slabs, stocks 44,580 slabs, equal to 45,880 slabs; estimated consumption for nearly four months 13,750 slabs, against an average of 5500 slabs a month in 1860. We estimate the stocks at 7000 slabs Banca (1600 from China), and 37,530 slabs Straits, at Boston and New York, equal to 44,530 slabs, with no shipments on the way from Europe or the East Indies. Of the Straits the bulk is not offered for sale for the present, as its cost is far above to-day's value, and holders look for a material rise with the revival of consumption. The latter has been very small for the last few months, and the following statement shows deliveries of only 3500 slabs a month. Neither dealers nor manufacturers, however, have any supply of consequence. 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922 ships, containing 290,918 tons, being a decrease on the corresponding month in 1860 of 6662 tons.—The importation of coals into London by railways and canals in the month of July was 121,421 tons, being an increase on the corresponding month in 1860 of 29,982 tons.

After such a long period of depression it is gratifying to observe that, although there has not been any very large amount of business transacted, there is a decided improvement in the tone of the MINING MARKET, and more enquiries for shares. It looks, in fact, as though a reaction for the better were setting in, and we hope it may prove lasting and beneficial. The fine weather in the early part of this week enabled the farmers to get a large quantity of corn-housed in good order, and the prospect of the harvest altogether is very favourable. This, with an easier money market, and a rise in the standard of copper ore would, in ordinary times, have created excitement in the market, but if we do not get this, we hope to see a steady and progressive improvement. The chief business since our last has been in Marke Valley, Tolvadden, Herodsfoot, Great South Tolgus, South Condurrow, East Grenville, Unity, Great Retallack, Old Tolgus, East Russell, Carn Camborne, Condurrow, Sortridge Consols, East Caradon, Calvadnack, North Treskerby, Tincroft, Stray Park, Wheel Grenville, West Caradon, New Treleigh, North Downs, West Polmear, &c. Alfred Consols, 1½ to 1½; Bryn Gwlog, 27 to 29; Calvadnack, 6½ to 7½; Carn Brea, 65 to 70. Condurrow shares have further advanced to 55, 60; 240k's Kitchen, 26 to 27; Copper Hill, 90 to 95; East Devon, 1½ to 2; East Basset, 74 to 76. Great Wheel Fortune, 10½ to 11; at the meeting the accounts showed a profit of 932l. 5s. 1d. in the quarter, and a dividend of 10s. per share was declared, leaving 527l. 19s. 11d. in hand. The general prospects of the mine are described as good, and when the stamping power is increased, late sales of tin will be fully maintained. The sales for the past quarter realised 5433l. 6s. 8d. East Caradon shares have been firm, though we understand the western end is not looking so well, shares leave off 23½ to 24½. East Carn Brea, 6½ to 7. Great Crinnis, 1½ to 1½; the lode in the 100 west is still improving, composed of congeal spar and rich copper ore, presenting every appearance of being near a deposit of ore. Some interest attaches to the progress of this mine, as about 40 years ago it was worked by the late Alderman Sir Matthew Wood, and we believe his son, the lately elected M.P. for the City. During the working by Sir Matthew the mine yielded copper ores to the value of 1,500,000l., and paid upwards of 100,000l. in royalties to the Carlyn family. The extraordinary deposit of ore failed at a depth of 64 fms., and, owing to Chancery suits, &c., the works were abandoned without reaching the second deposit, or the dip of the ore eastward. The present company have sunk a shaft from surface to the eastern ground 116 fms. deep, and will be at the 120 in about a month. The indications so far have been improving for another course of ore, and it is thought by practical agents that at the 120 the dip of the improvement in the 100 west will about come into the shaft. East Russell, 3½ to 3½. Great South Tolgus, 2½ to 3½, and in request. Hingston Down, 1½ to 2; Lady Bertha, 15s. to 17s. 6d. Marke Valley shares have been in good request, and leave off 9½ to 9½. Carn Camborne, 1 to 1½; New Seton, 45 to 50. North Basset shares have improved to 3, 3½. North Downs shares have been more freely offered, and leave off 4½ to 5. North Minera, 30s. to 32s.; Long Rake, 10 to 11; North Robert, 15s. to 17s. West Seton have been flat at 280 to 290; we understand the mine is at work again in the bottom levels, which were inundated after the accident to which we referred a week or two ago. In consequence of this the samplings have been interfered with, and we hear the dividend at the next and following meeting will be 7l. per share, instead of 10l., as formerly. North Roskear, 17 to 18; North Treskerby, 20 to 21; Prospidnick 17s. 6d. to 20s. Gonnemena, 2; at the meeting, on July 30, the accounts showed a balance against the adventurers of 256l. 0s. 6d. The report states the fall in the standard had affected the sales to the extent of 150l. The mine is looking better for copper, and for the present two months about 200 tons of copper ore will be sampled. Rosewall Hill and Ransom, 20s. to 22s. 6d.; Sortridge Consols, 11s. 6d. to 12s. 6d.; South Caradon, 29s. to 30s.; South Caradon Hooper, 12s. 6d. to 17s. 6d.; South Condurrow, 11s. to 13s., and in request; South Frances, 11s. to 12s.; Stray Park, 29 to 31. Old Tolgus United, 14 to 15; the 52 is worth 1 ton per fm., and is again improving; in the 42 the lode is 2½ feet wide, producing rich copper ore and congeal spar. Caidra, 30s. to 35s.; the leader in the 60, west of Walker's shaft, is still worth 15 cwt. of tin per 100 sacks, or about 50l. per fm.; the entire lode being from 6 to 8 feet wide. Wheel Norris, 37s. 6d. to 40s.; the prospects continue very cheering, and a good demand for the shares. Tincroft, 5½ to 5½; West Bryn Gwlog, 30. West Caradon continue flat at 40 to 42. Wheel Buller, 85 to 95. Herodsfoot have not been quite so firm, and leave off 33½ to 34½; the mine sold on the 24 inst., 80 tons silver-lead ore, at 24l. 7s. 6d. per ton. Wheel Clifford, 140 to 150; Wheel Ludcott, 2½ to 2½; Wheel Margaret, 39 to 41; Wheel Mary Ann, 8½ to 9½; Wheel Moyle, 1½ to 2; Wheel Trelawny, 13 to 14. Wheel Uny, 4 to 4½; the lode in the No. 2 shaft is reported worth 1 ton of ore per fm., and promising further improvement. Wheel Grenville became in demand on Wednesday, and leave off 1½ to 1½; in stripping down the side of the flat-rod shaft, on East Grenville lode, another part of the lode, nearly 2 feet wide, has been discovered, equally as good as East Grenville at the same depth. The cross-cut in the 80, towards the East Grenville lode, has reached the elvan to the south of the lode. Wheel Seton, 55 to 60; New Treleigh, 32s. 6d. to 35s.; in the 80, east of Carr's engine-shaft, the lode is 5 feet wide, worth for copper ore 3 tons per fm.; the winze below the 70 is worth 2 tons per fm.; and the 70 west, 2 tons. Great Retallack, 19s. to 21s., and in request; the indications for lead are still favourable, both at the shaft and in the 35, and many hundreds of tons of blende are being laid open, and which will be taken away very cheaply when the price of that metal improves. Merlyn, 15s. to 20s.; the 20 east, on the new lode, is approaching the north and south lode, and the ground has undergone a very favourable change. It is expected that in 3 or 4 yards the lode will be met with. Wheel Unity, 20s. to 22s. 6d.; at the meeting, on Thursday, the accounts showed copper ore sold, April and June, 6887. 0s. 8d., and a cash balance in hand of 757. 6s. The statement of assets and liabilities, charging the latter up to the end of June, without crediting 56 tons of ore sold on the day of meeting for 454l., showed liabilities, 923l. 18s. 1d.; deducting the ore sold, makes the actual liabilities 469l. 18s. 1d., and a call of 2s. 6d. per share was made. The 75 cross-cut is being driven by eight men, to cut the lode west of cross-course. This point, which is one of great interest, may be met with in a few days, and there is every indication so far of meeting with a good lode. The ore lately sold have come chiefly from the discovery in the 65, east of the cross-course, and towards which the 75 fm. level is now approaching; and whereas the ores formerly realised 3l. and 4l. per ton, it will be seen the present sale averages 8l. 2s. per ton, showing the great increase in the quality of the ore. Devon Great Consols, 34s. to 35s.; West Basset, 15 to 17. Wheel Basset, 75 to 80; at the meeting on Tuesday, the accounts showed a profit of 1286l. 5s. 7d. on the two months, and a dividend of 2l. per share (1024l.) declared, leaving 1441l. 0s. 11d. in hand. The pitches throughout the mine are still producing fair quantities of copper and tin; and in the cross-cut driving south from Carnkie shaft, in the 100, to intersect the south lode, the ground is letting out water freely, and from which it is expected the lode may be cut daily. Botallack, 160 to 170. Tolvadden shares advanced to 3½, 3½ buyers, and leave off 2½, 3½; about a month ago these shares, we believe, were about 5s. per share, and the great rise shows the folly of sacrificing shares at nominal prices when the prospects of the mines are good. West Rose Down, 15 to 17. Pendean, 5s. 6d. to 6s. 6d.; the ore sold on Thursday for 1095l. 8s. 4d. East Grenville shares left firm, at 40s. to 41s., till Friday, when they declined, and leave off 37s. to 38s. No report has been received at the office, or made public, of any change in this mine.

On the Stock Exchange a considerable amount of business has been transacted in Mining Shares during the week. The following prices are officially recorded in British Mining Shares:—Grenville, 1½; North Downs, 5; North Wheel Basset, 2½, 2½, 3½; Wheel Edward, 1½; Devon Great Consols, 35s. 35½; Sortridge, 4; Tincroft, 5½; East Caradon, 24½; Providence, 34½; Great South Tolgus, 3½; Herodsfoot, 34; Alfred Consols, 1½, 1½; Wheel Trelawny, 13½. In Colonial Mining Shares the prices were:—Australian, 1, 1½, 1½; Bon Accord, 1½, 1½; Dun Mountain, 7; Great Northern Copper of South Australia, 1½, 1½. In Foreign Mining Shares the prices were:—United Mexican, 4½, 4½, 4½; Copiapo, 37, 37½; St. John del Rey, 35½.

There has been a demand "outside" during the week for Great Northern, Cobre, St. John del Rey, Port Phillip, and Mariguita shares, St. John del Rey and Cobre shares having slightly advanced in price, the former leaving off 35, 35½. United Mexican still droop, and leave off 4½, 4½. The Worthing directors have published their report for the coming meet-

ing, from which it appears that they only require more dressing power to bring the mine into a paying state. The capital is, however, fully called up, and it is now proposed to issue the balance as preference stock. The land on lease must, in the course of events, become of considerable consequence to the company. Dun Mountain shares quiet, at 17s., 18s.; Linars, 6½, 6½; Bon Accord, 1½, 1½; Port Phillip, 20s., 21s.; Australian, 1, 1½; Labuan Coal, 2½, 2½ premium.

The closing quotations for shares in new undertakings were as follows:—Ocean Marine Insurance, 4½, 4½ prem.; Thames and Mersey Marine, 13-16ths, 15-16ths prem.; Universal Marine Insurance, ¾, ¾ dis.; London and Provincial Marine, ¾ dis. to par; China and Japan Steam, ¾, ¾ dis.; Natal Land, ¾, ¾ dis.; Oriental and General Marine, ¾, ¾ prem.; Mercantile Fire, 11-16ths, 13-16ths prem.

At Redruth Ticking, on Thursday, 3015 tons of ore were sold, realising 16,560l. 11s. 6d. The particulars of the sale were—Average standard, 123l. 13s.; average produce, 6½; average price per ton, 5l. 10s.; quantity of fine copper, 200 tons 18 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
July 11.....	2898	119 16 0	6½	5 0	279 0 0
" 18.....	5096	121 18 0	6½	4 15 0	77 4 0
" 25.....	3301	121 7 0	6½	5 2 0	73 16 0
Aug. 1.....	3778	121 2 0	6	4 14 0	78 10 0
" 8.....	3015	123 13 0	6½	5 10 0	82 8 0

Compared with the sale of last week, the advance has been in the standard 2l. 13s., and in the price per ton of ore about 3s. 6d. Compared with the corresponding sale of last month, the advance has been in the standard 3l. 8s., and in the price per ton of ore about 4s. 6d.

At the Wheal Basset meeting, on Tuesday, the accounts showed—Balance last audit, 1178l. 15s. 4d.; ore sold (less dues), 3957l. 17s. 11d.—5166l. 13s. 3d.—Mine cost, May and June, 2025l. 9s. 1d.; merchants' bills, 671l. 8s. 11d.; stationaries Court assessment, 6l. 14s. 4d.; leaving credit balance, 2463l. 11s. On the two months' working there was a profit of 1286l. 5s. 7d. A dividend of 1024l. (2l. per share) was declared, and a balance of 1441l. 11s. The agents' report stated that the pitches throughout the mine were still producing fair quantities of copper and tin. Giesler's lode was expected to be intersected in the next two months by cross-cuts in the 100 and 60 fm. levels from great lode. Williams's south lode was expected to be cut by the 110 cross-cut. Also in the 100 cross-cut from Carnkie shaft they expected daily to intersect the south lode.

At Craddock Moor Mine meeting, on July 31 (Mr. Alex. Fitzgerald in the chair), the accounts for March and April showed—Balance last audit, 1254l. 15s. 7d.; copper ore sold and carriage, 2379l. 9s. 5d.—3634l. 5s.—Mine cost, merchants' bills, and sundries, 2089l. 12s. 6d.; May dividend, 263l. 15s.; leaving credit balance, 1280l. 17s. 6d. The profit on the two months' working was 289l. 16s. 11d. A dividend of 263l. 15s. (5s. per share) was declared, and 1017l. 2s. 6d. carried to credit of next account. Capt. H. and J. Taylor and H. Phillips reported that the sales for the next two months will be about 290 tons of good quality copper ore.

At the South Wheel Seton meeting, on Thursday, the accounts for the four months ending June showed—Balance last audit, 541l. 5s. 7d.; mine cost, 486l. 8s. 1d.; merchants' bills, 239l. 16s. 3d.—1267l. 9s. 11d.—Calls received, 1200l.; old iron sold, 17l.; leaving debit balance, 66l. 9s. 11d. A call of 1l. 10s. per share was made. Captains Burt and Higgins reported that they have been continuing for the North Roskear lodes, which run into the sett, and find excellent indications for good lodes.

At Gonnemena Mine meeting, on July 30, the accounts for March and April showed—Mine cost, merchants' bills, and sundries, 1365l. 12s. 9d.—Balance last audit, 7l. 18s. 1d.; copper ore sold, 1047l. 19s. 11d.; tin sold, 53l. 11s. 3d.; arsenic sold, 43l.; leaving debit balance, 256l. 0s. 6d. Capt. Pascoe and George, Jun., reported upon the various points of operation—"Our stops and pitches throughout the mine are producing the usual quantity of copper ore, but from the quality not being so good, and the great depression in the standard, our sale for the past two months has not realised the amount we expected by over 1500l.; this, with the heavy merchants' bills charged for the new stamps, with upwards of 70l. for new whim-chain, accounts for the balance now against the mine."

At the Tincroft Mine special meeting, on Thursday (Mr. Tyrie in the chair), convened for the purpose of obtaining the feeling of shareholders upon the desirability of placing the company under the Cost-book System, it was unanimously decided that the question be not further proceeded with at this time. Details appear in another column.

At the North Providence Mine meeting, on Aug. 3 (Mr. J. A. Morgan, F.G.S., in the chair), it was resolved that the company be dissolved forthwith. Details appear in another column.

At the Wheal Unity Consols Mine meeting, on Thursday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts showed a balance of liabilities over assets of 473l. A call of 2s. 6d. per share was made. Details in another column.

At the River Tamar Copper Mine meeting, on Tuesday (Mr. Smees, F.R.S., in the chair), the accounts showed a cash balance in hand of 380l. 2s. 8d. The remaining call of 2s. 6d. per share will be made in a few days. Details elsewhere.

At the Central Minera Mining Company meeting, on Tuesday (Mr. R. J. Butler in the chair), the accounts showed a credit balance of 10s., and a balance due to the bankers of 138l. 12s. 9d. Details in another column.

At the Wheal Kitty (St. Agnes) meeting, on Thursday, the accounts showed—Balance last audit, 1192l. 2s. 4d.; March mine cost, merchants' bills, &c., 709l. 11s. 2d.; April, 791l. 11s. 3d.; salaries, discount, &c., 457l. 4s. 4d.—3374l. 19s. 7d.—Ore sold, 1121l. 4s. 3d.; Call, 625l.; leaving debit balance, 1628l. 15s. 4d. A call of 4s. per share was made. The agents' report stated that should the prospects continue to improve as they had for the past two months they believed that in a short time they should bring the mine again into a paying state.

At the Penhalls Mine meeting, on Thursday, the accounts showed—March mine cost, merchants' bills, &c., 457l. 4s. 5d.; April, 491l. 4s. 10d.; May cost, 472l. 0s. 1d.; salaries and sundries, 28l. 16s. 6d.—1449l. 5s. 10d.—Balance last audit, 42l. 18s. 1d.; ore sold, 1235l. 7s. 2d.; leaving debit balance, 153l. 0s. 7d. The loss upon the three months was 195l. 18s. 8d. The report of the agents stated that the coming in of the lode in the engine-shaft was an important feature. They spoke of the importance of holding the 30, west of this shaft, to the old men's workings before it, as they had thrown a great light on the ground about the old engine-shaft, where the company's works were first intended to be carried out, which when reached and fully developed, together with the chances of success about their engine-shaft and the south lode, would no doubt open up a good and lasting mine.

At the South Wheel Basset meeting, on Tuesday, the accounts showed a debit balance of 521l. 3s. 10d. A call of 1l. per share was made. Upon the six months ending June there was a loss of 620l. 14s.

ments will necessitate their so doing. After payment of dividends, and making every necessary reservation, a large balance of profit is carried over to the next account.

LEEDS, AUG. 8.—In Mining Shares buyers have acted with caution, and the dealings have been limited; in most descriptions of stock prices have had a downward tendency.—Brea Consols, 17s. to 20s.; Cornubia, 15s. to 18s.; Craven Moor, 3s. to 4s.; Merryfield, 4s. 6d. to 5s. 6d.; Niddendale, par to prem.; North Hallenbeagle, 15s. to 20s. Wensleydale, 7s. to 7d. 6d.—JOHN GLEDHILL AND CO.

The New Llandilo Lead and Zinc Mines are about to be worked by a cost-book company, with a capital of 5000l. The mine is in a well-known mineral district, and has been favourably reported upon by Mr. John A. Phillips, and Capt. Evans, Waters, Kenrick, and Redge. The lease is equal to 24 years, at 1-18th dues, and the Llandilo Railway Station is within 100 yards of the mine.

The Metropolitan and Provincial Bank has just been constituted under the Limited Liability Act, with a capital of 1,000,000l., in 100l. shares, and with a powerful direction. Of the 1,000,000l. there will be only one-fourth called at present, and it is thought the three-fourths thus remaining to be called for, if required, will form an ample guarantee to the bank's customers. The directors promise that they "will secure the services of the most able and experienced manager that can be obtained;" also that "in addition to the periodical audit by the auditors appointed by the shareholders, the professional auditors will make complete and continuous examinations of the accounts of the bank, and report thereon to the directors once in each month." We shall next week refer more fully to its prospects.

The directors of the National Company for Boat Building by Machinery having in terms of their circular addressed to the shareholders, dated July 23, resolved to limit their first issue of stock to 70,000l.; and this having been in all respects approved by them, have this day allotted the shares. The directors have satisfied themselves that with this capital the operations of the company can be most efficiently and advantageously carried on, and have stated their intention to issue further capital when required amongst the holders at the time being. We understand arrangements are being made by which the business of the company may be expected shortly to commence.

AUSTRALIA.—The screw steam-ship *Great Britain*, Gray commander, from Melbourne, on May 30, arrived at Liverpool on Monday, after a passage of 65 days. She had 540 passengers, and 82,195 cwt. (328,000l.) gold on freight. The mail steamer *Benares* had cleared at Melbourne for Point de Galle on May 25, with 48,825 cwt. of gold. The Legislative Council of Melbourne had appropriated 75,000l. for the supply of water to the gold fields. The *Bendigo Advertiser* reports that the quantity of gold sent to Melbourne by escort had been decreasing to an alarming extent for a few weeks; it attributes the falling off to one of the temporary lulls incidental to gold mining.

BOTTLE HILL.—During the dry spring months the water here was very short, and the stamps could not work more than half duty, but of late the water has increased. In the months of June and July tin ore was sold for 634l. 8s. 4d., and if the water supply continues the agent calculates on selling about 17 tons in six or seven weeks.

LEAD ORES.

Mines.	Tons.	Price per ton.	Purchasers.
East Loggias	65	£11 3 0	Panther Co.
Glogfach	50	14 10 0	Sims, Williams, & Co.
Cwmystwith	60	11 9 0	ditto
ditto	60	11 3 0	ditto
Wheal Wrey Consols	45	14 17 6	Sims, Williams, & Co.
Sold on the 8th August.			
Maesyrwddu	55½	12 2 6	Walker, Parker, & Co.
Coetia Lys	61	12 2 0	Adam Eytton.
Deep Level	19	10 10 0	ditto
Speedwell	12	11 7 6	Walker, Parker, & Co.
Rhosamor	90	11 19 0	ditto
Orsedd	22	12 6 0	ditto
Larys	30	11 15 0	Adam Eytton.
Lady Eleanor	4	11 18 0	ditto
Bryn Gwlog	22	11 13 6	Walker, Parker, & Co.
Tymaen	3	12 12 0	ditto
Talacre	1½	12 0 0	Adam Eytton.
West Merlyn	10	12 10 6	Walker, Parker, & Co.
Roman Gravel	22	11 14 0	ditto
Drygwyn	22	11 15 6	Adam Eytton.
Rhoswydol and Bacheiddon	18	11 3 0	ditto

BLACK TIN.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Gaidma	8 8 3 14	£29 10 0	£286 16	Biscoe Co.
ditto	2 6 2 15	59 10 0	138 14	ditto

COPPER ORES.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
West Basset	75	£4 8 0	Pendean Consols	75	£3 19 0
ditto	74	6 13 0	ditto	9	5 5 0
ditto	73	5 13 0	ditto	5	20 1 6
ditto	66	4 9 0	Great South Tolgus	47	7 14 6
ditto	65	4 5 0	ditto	45	7 15 0
ditto	44	5 11 0	ditto	37	7 3 6
ditto	43	4 5 6	ditto	26	9 12 0
ditto	35	4 2 0	United Mines	60	3 4 0
ditto	15	16 10 6	ditto	41	7 12 6
Carn Brea	114	0 3 6	Treloweth	41	7 12 6
ditto	61	2 13 6	ditto	32	5 14 6
ditto	52	7 0 6	ditto	24	10 16 0
ditto	49	4 4 6	ditto	20	0 6 0
ditto	47	3 11 6	ditto	8	19 12 6
ditto	43	7 5 0	East Alfred Consols	64	3 17 0
ditto	37	4 15 6	ditto	67	4 2 0
Great Wheel Alfred	69	2 15 0	Charlotte United	43	8 4 0
ditto	62	2 12 6	ditto	29	7 18 6
ditto	40	10 11 0	ditto	29	7 18 6
ditto	38	4 13 0	Rosewarne United	58	6 9 6
ditto	37	3 18 6	ditto	54	10 11 0
ditto	36	6 0 0	Wheel Buller	45	10 5 6
ditto	18	2 2 6	ditto	31	3 11 6
Levant	102	1 19 0	Copper Hill	38	6 11 6
ditto	73	8 12 6	ditto	35	2 0 0
ditto	58	5 15 6	Wheal Unity Consols	20	3 1 0
ditto	38	5 17 6	ditto	19	15 1 0
ditto	2	15 18 6	ditto	20	6 0 0
Par Consols	61	7 0 0	West Providence	20	6 0 0
ditto	50	8 8 0	Rosewarne Consols	17	7 2 6
ditto	73	11 13 0	Spear Moor	14	7 15 6
ditto	31	3 12 6	Camborne Consols	10	3 15 0
Pendean Consols	83	3 5 0	St. Aubyn and Grylls	7	5 14 0
ditto	80	3 14 6	Boscawell Mines	4	8 11 0

Average Standard	£123 13 0	Average Produce	£36
Average Price per ton	£5 10 0		
Quantity of Ore	3015 tons	Quantity of Fine Copper	200 tons 18 cwt.
Amount of Money	£16,560 11 6		

LAST SALE.—Average Standard, £124 2 0.—Average Produce, £36 6 Standard of corresponding sale last month, £119 16 0.—Produce, 6½.

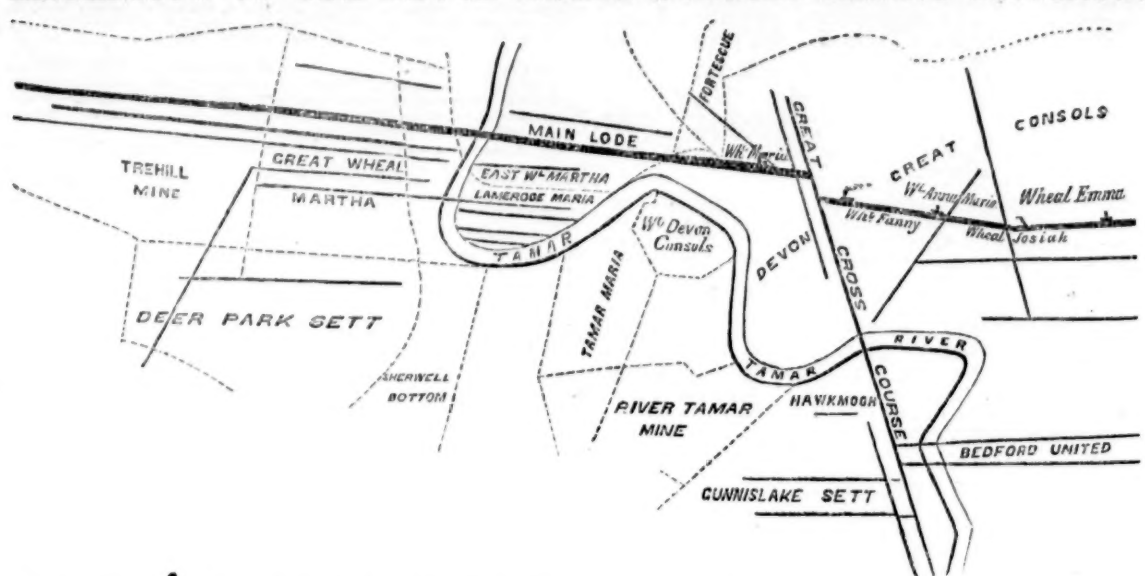
COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	840½	£2165 3 0
Freeman and Co.	182	1047 10 0
Grenfell and Sons	59½	545 2 0
Sims, Williams, and Co.	550½	2955 7 0
Williams, Foster, and Co.	254	2455 4 6
Mason and Elkington	298	1958 12 0
F. Bankart	10	3 0 0
Copper Miners' Company	749½	3676 2 9
Charles Lambert	249	361 1 6
Newton, Keates, and Co.	164	952 14 0
Sweetland and Co.	183	440 13 6
Total	3015	£16,560 11 6

NO SALE on Thursday next, August 15.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 117½—Phoenix Mines 624—Marke Valley 393—Wheal Croisne 343—East Caradon 280—West Caradon 233—Great Martha 220—Wheal Edward 217—Bedford United 204—North Robert 158—Wheal Emma 147—Wheal Friendship 120—Devon and Cornwall 105—Sortridge Consols 74—Kelly Bay 71—Molland 60—Tavy Consols 38—West Devon Consols

EXTENSION OF THE DEVON GREAT CONSOLS MINING DISTRICT.



EAST WHEAL MARTHA MINING COMPANY (LIMITED).

Capital £15,000, in 6000 shares of £2 10s. each.
5s. per share to be paid upon application, and 5s. upon allotment. All future calls not to exceed 5s. per share, and not often than quarterly.

DIRECTORS.
GEORGE SEARBY, Esq., Crown-court, Threadneedle-street, London.

EDGAR WILLIAMS YARROW, Esq., 14, Arundel-square, London.

JAMES LANE, Esq., 44, Threadneedle-street, London.

P. C. HAWKINS, Esq., 3, Broad-street, Oxford.

THOS. COOPER SMITH, Esq., Warford-court, Throgmorton-street.

BANKERS—London and County Bank.

SOLICITOR—Frederick Wm. Snell, Esq., 1, George-street, Mansion House.

CONSULTING AGENT—Capt. Joseph Richards.

SECRETARY—Mr. E. Evans.

OFFICES,—23, MOORGATE STREET, CITY, LONDON, E.C.

The object of this company is to purchase and work the mineral ground lying between the Devon Great Consols and the Great Wheal Martha.

There are few instances of mining where success would appear to be more certain than in this case, as this mine is situated west of the Devon Great Consols, and east of the Great Wheal Martha.

The success of the former mine is too well known to the public to require much comment, but it may be stated that it has returned in dividends nearly £1,000,000, on an original capital of £1024.

The Great Wheal Martha Mine is one of the most successful instances of an old mine being reworked, the company having sold in a few months ore to the amount of nearly £3500, and having at the present time about 1000 tons of ore broken and being prepared for sale, while the reserves in the different levels amount to more than 5000 tons, and there is no doubt the mine will soon commence paying good and lasting dividends. All this is the produce of one lode only, which has held continuously from the upper to the lower level, and is now in the bottom level 16 ft. wide, a fine course of ore. This lode is by practical men considered to be a continuation of the Devon Great Consols lode, and as the East Wheal Martha Mine is situated exactly between the two mines, there cannot be any doubt of this mine having the same lode running through the entire length of the set, from east to west; and there is one great fact to be borne in mind, that the further the levels at Great Wheal Martha are driven east the richer the lode becomes; and as the lode is dipping east and passes through this property, there can be no doubt of the mine proving as rich as its neighbours.

This mine will be drained to a considerable extent by the Great Wheal Martha, as the levels in that mine approach it eastward, a fact of the greatest importance as regards the expenditure and development of the mineral wealth contained in this property.

This mine has been worked and a large capital expended by a previous company, but having sunk their shaft down in a valley, where they were inundated with water from the higher ground above them, they were compelled to stop. They had just discovered that they had sunk their shaft too far south to cut the Devon Great Consols lode, which passes through the high ground above, and were making great exertions by driving a level northward to intersect this lode, but want of sufficient steam power, and the shareholders not being inclined to subscribe further, the mine was abandoned.

Arrangements have been made with the present proprietors for the purchase of this property, the proprietors to receive 2500 shares, free of all calls, and £1500 in cash, the latter to be returned to this company by an allowance out of the dues as the ores are raised and sold. This return to be made is a fact of importance, proving that the proprietors have every confidence in the mine making large returns, and bringing them in a large revenue.

Application for prospectuses and plans to be made to Mr. E. EVANS, 23, Moorgate-street, London.

The following is a report from Captain Joseph Richards, who, being connected with the run of the lodes and their connection with this property, and quite capable of giving an opinion on the future prospects of this mine:—

Aug. 3, 1861.—I beg to hand you my report on this mine. It is situated directly east and adjoining Great Wheal Martha, where large returns of copper ore are being made, and the Devon Great Consols is in a direct line east of East Wheal Martha, so that this mine may be considered to be in a very first-rate position: the great lode of Wheal Martha must run directly through the set, as well as several other lodes of very great promise. There have been shafts sunk and levels driven in East Wheal Martha, and although they cannot now be seen under the water in the lake, I am assured that the prospects were such underneath as might be fully expected from the very great and good appearances of the lodes at surface. I am fully justified in highly recommending East Wheal Martha as a mining property of very much more than ordinary value as a speculation, and I am of opinion that those who may invest therein will have no cause to regret it, but, on the contrary, have every reason to congratulate themselves on the advisable selection of this extensive and exceedingly tempting property as an investment, containing as it does the necessary elements of success. In addition to the very fine appearances of the lodes themselves, there are cross-courses and intersections thereof, with the lodes attendant on which are often found the most splendid and valuable courses of ore. I will conclude by advising you to commence operations as soon as you can manage to do so, and I am exceedingly sanguine of the results proving in every way all I have said and intended to convey relative thereto. If you will refer to my report on Great Wheal Martha of Oct. 3, 1859, you will perceive that the results are bearing out what I then said of that property, and in East Wheal Martha you have a mine the prospects of which are not exceeded in my belief in any mine in the two counties, and I unhesitatingly advise all and every one who can take an interest therein.

JOSEPH RICHARDS.

Now ready, price 1s.

THE PROGRESS OF MINING IN 1860, BEING THE SEVENTEENTH ANNUAL REVIEW.

By J. Y. WATSON, F.G.S., Author of the Compendium of British Mining (published in 1843), *Gleanings among Mines and Miners*, &c.

The SIXTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 31, 1859, and January 7, 1860.

A FEW COPIES OF THE REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also A FEW COPIES OF THE REVIEW OF 1852, 1853, and 1854, MAY BE HAD ON APPLICATION AT MESSRS. WATSON AND CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR.

published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mining and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON AND CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Messrs. WATSON AND CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30TH MARCH, 1861, with Particulars of the Principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Five Years, &c., is NOW READY.

Price One Shilling. At 117, Bishopgate-street Within, London, E.C.

Reliable information and advice will at the time be given on application.

Also, COPIES OF "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

COLLIERY EXPLOSIONS, AND A MEANS TO PREVENT THEM.

BY RICHARD HUGH HUGHES.

A pamphlet replete with highly interesting historical narrative, and thoroughly business-like remarks, bearing upon colliery explosions and colliery ventilation.—*Mining Journal*.

London: F. Plummer, printer, 21, Great New-street, E.C.; and the Author, Atlas Safety Gas-Fitting Works, Hatton Garden.

Preparing for publication, in Ten Parts, at 6d. each, the Second Edition of SHAKSPEARE: HIS TIMES AND CONTEMPORARIES.

By GEORGE MARKHAM TWEDELL.

Editor of the "Stokesley News, and Cleveland Reporter," "Tweedie's Yorkshire Miscellany, and Englishman's Magazine," "The Oddfellows' Recorder, and Fireside Companion," "The Youth's Storyteller," &c.

Subscribers' names received by the author, Cleveland Cottage, Stokesley, Yorkshire; and at the office of the "Freemasons' Magazine."

Notices to Correspondents.

LIMITED LIABILITY.—I trust you will excuse me taking up your time and space, but believing that there are many, like myself, who do not understand clearly the Act of Parliament relating to mining operations generally, is the apology I have to offer for troubling you. I am one of a few in this locality who have become shareholders in a "lead and coal mine," which is expected in time to be a very prosperous one; at present it is not enrolled, and we are rather anxious that it should be, but we do not understand clearly the Act of Parliament relative to our position. We have purchased our shares, and paid all up, and are now paying monthly "calls" in addition. What we wish to learn through the Journal is this:—That supposing the company was at once to enrol itself according to the Act of Parliament, "limited liability," where could the limited liability of our case be settled? We have paid for our shares, and are now paying calls. Would the Act limit the power of the directors in calling more than was necessary to meet the expenses, and in case of infringement give redress to the shareholders? Does the Act give protection to the shareholders against creditors, and vice versa? I should feel extremely obliged if you would insert this letter in next week's Journal, that it may elicit replies from your numerous readers and correspondents.—INQUIRER: Aug. 7.

MINING REPORTS.—"One of the Committee of Great Retallack" has asked why I have singled it out as the subject of my complaint? I answer, because it is the only mine in which I am interested that adopts such an objectionable course. The agents of Retallack and Great Martha send their reports on the Wednesday and Thursday previous to the publication of the Journal; and I wish to know why the agent of Great Retallack cannot send his report on the Thursday likewise? I trust we shall no longer see reports a week old. If the committee men will refer to the Journal of last week, he will find that so far from its being the rule to send the reports so as to reach the office on Monday, it is the exception. A large majority sent them on the Thursday.

SHAREHOLDERS.

QUARTZ CRUSHING.—The writer wishes to know the price of Mitchell's Quartz Crushing Machine, also the address of the patentee or maker. If satisfactory, a machine will probably be ordered for Nova Scotia.—A. B.

CLIMAX AND WENTWORTH.—We believe the last call made by this mine was 11. per share on Jan. 21.

DUN MOUNTAIN COMPANY.—CHROMATE OF IRON—"W."—The so-called chromate of iron is rather a compound of oxides of chromium and of iron. Its chief application is in the manufacture of chrome of potash, which is used in various forms in calico printing and dyeing. Mr. Rudolph Auerbach, a shareholder in the Dun Mountain Company, who, it will be recollected, stated at the recent meeting of that company that he could readily sell upon contract between 4000 and 5000 tons per annum, and that any quantity would be readily disposed of at prices that would leave a handsome profit to the company, informs us that for this country the consumption of chromate of iron may be estimated at about 20,000 tons per annum, the value ranging from 8s. to 12s. per ton, according to quality, and there is also a large quantity used on the Continent.

AIR MACHINERY.—A reply to the letter of "Inquirer" by Capt. Matthew Francis will appear in next week's Journal.

CROOKHAVEN.—A large number of shares have during the week changed hands, having been bought by parties for investment, both in England and in Ireland. It will be well if you record this fact—the latter deserving special attention, as showing the appreciation in which the mine is held in the sisterisle. I cannot ask you to pronounce this as the best of the progressive mines, but under the present management it is being worked with great energy and success, and needs not the pen of the writer to point out its merits, the agent's weekly reports being the best reference, and also the safest index to the truthfulness of the foregoing remarks.—ONE INTERESTED.

WHEAL CONCORD.—In answer to your correspondent "C. H." and others who are making enquiries as to this mine, I have to inform them that very information can be obtained by application at this address—W. S. Trotter, Secretary, 1, Great Winchester-street, E.C.

RAILWAYS IN BRAZIL.—A "Shareholder" calls attention to the fact that Brazilian railway stocks continue dull, although they carry a guarantee of 7 per cent. from a Government second to none in financial reputation. Those of the Bahia line, which is certain to be successfully finished considerably within the allowed cost, are at 34 discount on each 20s. share, while those of the San Paulo, introduced by the Rothschilds, who are the financial agents of Brazil, are at 2 discount. As there is only 44. at present paid on each 20s. share, this is equivalent, for the moment, to half-price. Yet this line, it is said, is also sure to be finished, not merely within the cost allowed, but some years within the time specified, while the accounts of the climate and of the prospects of the traffic seem, from all sources, to be of a very encouraging character. The only explanation offered for such a singular state of prices is to the effect that a third line—the Pernambuco—has been badly managed, and is not likely to be completed without an expenditure beyond the guaranteed capital, which may reduce the interest from 7 to 6 per cent.; and that the public, not being in the habit of looking at details in such matters, regard the two other undertakings as if they were in an analogous position.

GREAT RETALLACK.—To "An East Anglian" and others who have addressed us respecting this mine, we may state that we understand orders have been given by the committee for the reports in future to be written on Wednesdays, and we presume that other mines will, as far as possible, adopt the same plan, that the latest possible information may appear in the Journal of Saturday.

chief organ of those interests, earnestly urged the necessity for a Government enquiry, and no remonstrance against the course we have felt it our duty to pursue has been offered. Though those who are fully cognisant of the evils may not take an active part in promoting an enquiry themselves, they do not wish to oppose the efforts of others. He must indeed have a forehead of brass who, knowing the miseries which mining as now conducted produces, would dare to say it is not the imperative duty of the Government to ascertain whether those miseries are in fact inevitable, and if not, how they may best be avoided or diminished? There may be and are those who are opposed to any actual interference with the management of mines, and very naturally, but that is not the present proposition. All that we ask for is an enquiry to ascertain what ought to be done. We do not consider that the necessity for Government interference has yet been proved, and nothing but necessity can justify it. Miners, both employers and men, are free agents, and have a right to carry on their business in whatever manner they please, provided it be so carried on as not to be injurious to others, or oppressive to any. The question is, are mining operations now so conducted as to be so importantly injurious to national interests and reputation for humanity? Are there evils connected with mining to permit which to continue would be disgraceful to us as a Christian people, and would those evils be put in process of remedy if their existence were fully exposed, and proof of their being susceptible of remedy publicly given? We answer all these questions in the affirmative, and reply that that which destroys the health of a large class of our industrious fellow-countrymen—shortens their lives on the average by nine years each—more than doubles the proportion of those who are incapacitated from work by illness—reduces their working abilities by a third—makes numbers of wives widows, and children orphans—is a matter not merely of local but of national importance, and it will be a national disgrace if we neglect to enquire whether or not the allegation be true—that these tremendous evils are not inevitable. For our part, we have not the slightest doubt that they may be mitigated, and that they will be if the ignorance from which they spring can be removed, and the indifference with which the sufferings they occasion are often regarded is effectually aroused. Whether the Government enquiry we advocate will suffice alone to do this remains to be seen; that it will do much is certain; that it will do all that ought at first to be attempted is the opinion of many whose opinions we hold in high respect. Others, among whom is an esteemed contemporary in Cornwall, hold that metal mines ought to be placed under the same systematic and permanent inspection as coal mines, and regulations for the protection of the men working in them enforced by law. There are great difficulties in this, and we doubt the expediency of attempting more than inspection without coercion, and contend that no attempt at compelling the observance of precaution should be made until all other means have been tried and failed. Nay, we are not prepared to recommend a system of permanent inspection; even all we now ask for is an authoritative enquiry, simply leaving all subsequent questions to be determined by the result.

We have great faith in the efficacy of authoritative enquiry, with publication of the results in such cases, for often more real improvement is thus effected than by positive legislation. The course of sanitary improvement is a striking instance of this. It is about twenty years ago that public attention became strongly called to the existence, among crowded populations especially, of causes of disease, productive of intense and extensive misery and loss of life, but capable of removal or mitigation. Much has since been done in remedy by improvements and additions to the law, but ten times more benefit has resulted from the proof given by various Government enquiries, particularly those by the Health of Towns Commissioners and by the General Board of Health, that there was a great loss of life, health, and comfort which might be, and, therefore, ought to be, prevented. Intelligence was enlightened, feeling excited, and conscience aroused by the exposure of discomforts and losses needlessly submitted to, miseries needlessly endured and wrongfully inflicted. A strong determination that the evils exposed should be removed, or at least diminished rapidly, grew up, and the world has probably never seen any improvement proceed so quickly and so surely as that of the public health. One chief reason why we do not always perceive the full value of what we have gained is, perhaps, the best sign of all; we have acquired a high standard of perfection, and have learnt to be intolerant of evils which a short time ago would have passed almost unnoticed. Can it be doubted that a like happy result would follow a public exposure of the evils from which miners suffer? If that which is now known to the enquiring few became the active faith of all, and especially if all mine managers not only knew but knew that everybody knew that the excessive destruction of life amongst miners was the result not chiefly of an unfortunate choice of employment, but proof of the mismanagement of their employers, is it not certain that many who are now careless or indifferent about the health of their men would regard that as the most important of their duties? Still more certain would be the effect if it were proved, as it would be proved, that an enormous waste of money accompanied and is caused by the waste of life, health, and strength which mine mismanagement occasions.

Far more misery arises from ignorance and indifference to suffering than from intentional cruelty. Managers of mines do not expose their men to needless injury of health intentionally; on the contrary, they would gladly save them from such danger, but some do not know all that needs to be done, and others cannot persuade the adventurers, at whose cost the improvements needed must be effected, how necessary they are, and how profitable they would be. The adventurers also do not sin in this matter willfully; they would not do what is done for them did they know the cost of human suffering their injudicious parsimony occasions, and certainly not if they were as convinced as we are that no money could be more profitably spent than in properly ventilating a mine, and saving the men from the exhausting labour of climbing long ladders. Systematic enquiry has proved, what has long been well known to the most experienced coal viewers, that the regulations which conduce to the safety of the collier are profitable to the coalmaster. In the case of ventilation (the great fault of metal mines) this is pre-eminently the case; in a badly ventilated coal pit the men can do only four-fifths of their proper work, while the cost of ventilating is far less than one-fifth of the wages. There cannot be a doubt that systematic enquiry would prove to all what the most enlightened mine captains well know—that a mine worked to the destruction of life is working to destruction of profit, and when that becomes not merely the belief of the enlightened few, but the conviction of all, dangerously managed mines instead of being the rule will become the exception. The expediency of empowering Government Inspectors to frame rules, enforceable by penalties, for conducting metal mines may well be doubted, but no one can fairly deny that to enquire what management is successful in preserving health, and by such enquiry to keep attention of mine managers directed to this important subject, would be followed by benefit far greater than the slight expense it would entail. There are, indeed, men who argue that it is not the proper province of Government to do anything which at all interferes with individual action, provided that be not actually criminal. We, on the contrary, hold that it is the duty of Government to guard against every form of evil threatening the general welfare, provided it be clearly apparent that the evil is of sufficient importance to call for such interference, and much greater than any to be reasonably apprehended from the interference itself, for we willingly allow that Government interference may be an evil, though often it is a very small one. In the present instance the evil which we ask, that a remedy may be sought is great both in extent and intensity, while the interference we ask for is simply enquiry, and the evil that can occasion must be almost infinitely small, if there be any.

One objection that has been urged against such an enquiry appears to us scarcely worth consideration, but as it has been urged by one whose opinion is likely to have weight it may as well be noticed. It has been stated as an objection to the enquiry we ask for, but why we cannot perceive, that the working miner is a speculator in the prosperity of the mine as well as the adventurer—the one risks his money, the other his health, and even his life. The miner knows that unless the adventure can be prosecuted at small cost it will not be prosecuted at all; he is, therefore, unwilling to insist upon expenses being incurred for his protection, lest the effect should be to cause the mine to be abandoned altogether. This seems to us to be no reason against, but a very strong reason for, an enquiry from without. If there were a conflict of apparent interest between masters and men, the former resisting and the latter desiring improvements of management, there would be better ground for hoping that the men would be able to induce their employers to guard their health effectually. But if it be, as these objectors assert, the apparent interest of the men to acquiesce in saving money at the risk of life, then is it more, not less, important that an authoritative enquiry should be made, the result of which we are sure will be to prove that the same causes which destroy the health diminish the working powers of the men. This, though self-evidently true, is not practically acknowledged and acted upon as it would be if all knew what is well known to

chief organ of those interests, earnestly urged the necessity for a Government enquiry, and no remonstrance against the course we have felt it our duty to pursue has been offered. Though those who are fully cognisant of the evils may not take an active part in promoting an enquiry themselves, they do not wish to oppose the efforts of others. He must indeed have a forehead of brass who, knowing the miseries which mining as now conducted produces, would dare to say it is not the imperative duty of the Government to ascertain whether those miseries are in fact inevitable, and if not, how they may best be avoided or diminished? There may be and are those who are opposed to any actual interference with the management of mines, and very naturally, but that is not the present proposition. All that we ask for is an enquiry to ascertain what ought to be done. We do not consider that the necessity for Government interference has yet been proved, and nothing but necessity can justify it. Miners, both employers and men, are free agents, and have a right to carry on their business in whatever manner they please, provided it be so carried on as not to be injurious to others, or oppressive to any. The question is, are mining operations now so conducted as to be so importantly injurious to national interests and reputation for humanity? Are there evils connected with mining to permit which to continue would be disgraceful to us as a Christian people, and would those evils be put in process of remedy if their existence were fully exposed, and proof of their being susceptible of remedy publicly given? We answer all these questions in the affirmative, and reply that that which destroys the health of a large class of our industrious fellow-countrymen—shortens their lives on the average by nine years each—more than doubles the proportion of those who are incapacitated from work by illness—reduces their working abilities by a third—makes numbers of wives widows, and children orphans—is a matter not merely of local but of national importance, and it will be a national disgrace if we neglect to enquire whether or not the allegation be true—that these tremendous evils are not inevitable. For our part, we have not the slightest doubt that they may be mitigated, and that they will be if the ignorance from which they spring can be removed, and the indifference with which the sufferings they occasion are often regarded is effectually aroused. Whether the Government enquiry we advocate will suffice alone to do this remains to be seen; that it will do much is certain; that it will do all that ought at first to be attempted is the opinion of many whose opinions we hold in high respect. Others, among whom is an esteemed contemporary in Cornwall, hold that metal mines ought to be placed under the same systematic and permanent inspection as coal mines, and regulations for the protection of the men working in them enforced by law. There are great difficulties in this, and we doubt the expediency of attempting more than inspection without coercion, and contend that no attempt at compelling the observance of precaution should be made until all other means have been tried and failed. Nay, we are not prepared to recommend a system of permanent inspection; even all we now ask for is an authoritative enquiry, simply leaving all subsequent questions to be determined by the result.

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THE MINING JOURNAL.

Railway and Commercial Gazette.

LONDON, AUGUST 10, 1861.

LOSS OF LIFE AMONGST CORNISH MINERS—No. VII.

The late Home Secretary, Sir G. C. Lewis, on three occasions all but promised that there should be a Government enquiry as to the causes of and remedies for the excessive fatal disease amongst metal miners, though he would not pledge himself as to when the commission should be issued.

Last year he appeared to think that the demand for the enquiry should first proceed from those most directly interested. On the 23d ult. he replied that it was a question mainly of time. Possibly when Sir G. C. Lewis gave this answer he considered that it would be better his successor to office, Sir G. Grey, than himself should decide as to the time for the enquiry, for we trust there is no question as to the enquiry itself. Sure we are that if either of these right honourable gentlemen were as strongly impressed as we are with the misery now inflicted and endured in mining, short time would elapse before the remedy was sought for and applied. Let us just imagine any man being informed, upon as trustworthy evidence as we have adduced in this case, that the dormitories of the school at which his sons were being educated were so badly ventilated that many of the boys were ill, some had died, and all were in danger, how many days or hours would be allowed to pass before enquiry was made whether the statement were true or not? How prompt would be the steps taken if it were found to be true! Of course, we do not expect a minister acting for the public to be as decisive as a man acting for his own family; but is there any good reason for a long postponement of an enquiry three times acknowledged to be needed, and to which no one has offered the slightest opposition?

It may, indeed, be said that those immediately concerned do not desire an enquiry, and possibly enough some whose shortcomings may be exposed by it do not. But that such an enquiry (for be it observed no actual interference with mining is proposed) would not be either threatening to mining interests, or unacceptable to most of those concerned in mining, may be safely assumed from the fact that we have, in these columns of the

the most intelligent miners, and one great advantage of an enquiry would be to render the intelligence of the few more available for the benefit of the many.

It has been said that this is simply teaching miners and mine adventurers how to conduct their business, which they ought to know themselves, and in which it is not the province of Government to instruct them. Such is, however, a glaring misrepresentation of the intention and effect of such an enquiry as is proposed. Though communicating, or rather diffusing, useful knowledge of mining may be one of its accidental results, its main object and effect will be to direct attention to that which is now scarcely thought to be a branch of mining at all, though we trust enquiry would prove that it is the most important branch of any,—how to save the health, and thereby economise the strength, of those whose labour produces all the wealth of mining.

FOREIGN MINING, AND THE NEW TARIFFS—No. II.

By the report of the Liege Chamber of Commerce, it appears with regard to zinc and lead that the Société de la Vieille Montagne produced last year in all its establishments 70,545,956 kilos. of minerals of all kinds. Of this quantity the workshops of Belgium and the neutral territory dealt with 54,000,000 kilos., and the German workshops with 16,000,000 kilos. The total production of rough zinc in all the establishments of the Société amounted to 28,925,001 kilos., and of this total the workshops of Belgium and the neutral territory produced 3,000,000 kilos., and the Prussian workshops 6,000,000 kilos.; the production of 1860 exceeded that of 1859 by 4,000,000 kilos. Of 11,464 tons of rolled zinc, 1870 tons were sold in Belgium, and 9594 tons were exported by Antwerp for England, Hamburg, and other countries. Of 1558 tons converted into white zinc, 143 tons were sold in Belgium, and 1415 tons exported and forwarded to America, England, and Hamburg. It results from these totals that the Vieille Montagne sold in Belgium only about one-eleventh of its Belgian production. The Société de la Vieille Montagne deserves to be placed in the first rank among the industrial establishments of the Continent, in consequence of the interest which it manifests in the moral and material welfare of the numerous body of workpeople whom it employs. At the close of 1860 the Société had in its various establishments 5627 workmen, of whom 2551 were in Belgium; and as the families of these workmen living on their wages numbered 11,628, a total of 17,255 individuals found the means of subsistence in the employment which the Société provides. In this very considerable total the establishments of Belgium and Moresnet figure for 11,756 persons. The sum distributed in wages in 1860 in all the establishments amounted to 3,638,896 frs. 74c., of which 2,578,888 frs. 88c. were paid in Belgium and at Moresnet, showing an average payment to each workman of 2 frs. 29c. per day. The working population in the Belgian and neutral territory of the Vieille Montagne drew out of its institutions during the year relief to the amount of 107,877 frs. 82c.—that is to say, from a "bank of succour" 63,069 frs. 2c., and from a "bank of foresight" 44,808 frs. 80c.; among the 5573 workmen employed in 1860 in the establishments of Belgium and the neutral territory, there were 1769 cases of incapacity for labour arising from sickness, wounds, burnings, and slight indispositions, which occasioned 32,047 days of idleness. These figures show for the year an average of about nine days sickness per man, and in each case of incapacity for work an average of 18 days. The assistance accorded to sick workmen amounted in all the establishments of the Société to an average of 74c.—a fraction under 75d.—per day's sickness; and the available balances in the banks of succour and foresight amounted together, Dec. 31, 1860, to 401,601 frs. 77c.; at the same date the savings banks formed in connection with the Société comprised 218 depositors, whose aggregate balances amounted to 142,398 frs. 3c., or an average deposit of 653 frs. 20c. in each case. The mines, workshops, and foundries of the Société de Corphalie produced in 1860 2,778,778 kilos. of zinc, 1,222,241 kilos. of lead, and 392 kilos. of silver. These totals show a diminution as compared with the previous production, which as regards the zinc is attributed to the unsatisfactory commercial position of that metal during 1860, and as regards the lead to an accidental deficit in the working of foreign mines, the products of which are dealt with. The selling price of zinc and lead was not favourable in 1860, and presented even a further fall, as compared with the unsatisfactory rates current in 1859. The causes assigned for this state of things are, first and foremost, the troubled aspect of political affairs, the American crisis (we do not quite understand this, for American politics did not assume their present sanguinary phase till February or March in the present year), and also to an excessive development of the general production of Europe. "Zinc and lead," the Chamber adds, "are completely free from dues on entering our country, however much other products are still protected, if not prohibited. Is it just to make on one side a free exchange, and on the other to maintain the principle of protection? Have not those who fabricate zinc and lead a right to demand that the injury done to their selling price by free trade should be compensated by the benefits which the same free trade applied completely would procure them in the purchase of matters directly required in their industry or consumed by their workmen? They have already established a just demand concerning the unfair treatment which zinc minerals experience between Belgium and the Zollverein; this last country imposes on their export a duty of 6 frs. 25c. per 100 kilos., while Belgium lets them go absolutely free; yet it exports to Prussia almost as much as it receives from it. This difference of regime shocks equity, and is a burden on our industry. German zinc minerals are not more precious than those of Belgium, and the manufacturer of Stolberg or Eschweiler seems to us sufficiently favoured by relative facilities of transport without resorting to obstacles on the export of raw material." Besides the products just mentioned, the Société de Corphalie furnished in 1860 important quantities of ironstone and pyrites. The first suffered from the diminished activity of siderurgical industry, and sold with less profit than in 1859; but pyrites, on the contrary, were sought after for exportation, and sold at a good price. The favourable position of this article proceeds from the enhancement in price of rough sulphur, caused by the immense increase in the consumption of that article through the appearance of oidium in the vines. The Chamber considers the situation of affairs, on the whole, rather precarious, and, having regard to eventualities, feels its duty to raise its voice in favour of the producers of the district, in order that the conditions under which they labour may be put on the same footing as those of their foreign competitors.

With regard to the coal trade of Belgium, the report shows that foreigners are as awkward rivals to foreigners as ever the much dreaded English can be. Thus the Chamber observes that the competition of Liege coal with that of Charleroi in the market of the French Ardennes will only be easy for the Liegeois when the navigation of the Meuse, ameliorated by canalisation, reduces freights, and when a more direct line of railway from Liege to Luxembourg unites the former with the centre of consumption, the present circuitous route by Namur being a great disadvantage. The Chamber adds: "As for those of our openings where we encounter the coal of the Ruhr—the openings of Limbourg and Holland—we shall certainly lose them if Prussian coal continues to be offered at its present extremely low rates. In the Limbourg this coal ascends the Meuse as far as Venloo, which for a lengthened period has formed an important market for Liege. From Venloo and the neighbourhood considerable quantities of combustibles are exported to the frontiers of Prussia, and Liege will only be enabled to keep its connection by the Meuse receiving promptly large improvements (in order to sensibly diminish the expenses of transport) or by the execution of the Canal du Nord, projected by Napoleon I., which would unite the Zuidwillemswaard Canal to Venloo. Among the materials the use of which amounts to a considerable item in the working expenses of the mines, wood for props figures prominently. In certain collieries it amounts to 15 per cent. of the return price. The most suitable, and the most generally employed, are fir trees; and a great part of them come to us from the Limbourg, being brought back by the bateaux transporting the coals. We have previously mentioned the exorbitant duties levied on this wood on its entry into the country, and the Government would perform a good administrative act, and remain faithful to the principles which guide it in matters of customs, if it submitted a revision of the tariff in this respect to the consideration of the Legislature. Wood for sustaining purposes is certainly a matter of primary importance to the coal workings, and yet a duty of 20 to 25 per cent. on their value is actually imposed on standels of large dimensions, indispensable in the maintenance of galleries." With respect to the operations and products of the Belgian blast-furnaces, the Chamber harps upon the same string—customs duties and official impediments of all kinds must be removed, if Liege is to hold its own. By reason of various circumstances, the relations of Liege with the market of the Zollverein, which furnished the principal outlet for its pig-iron, grow more and more feeble, so much so as to induce fears of a complete cessation in future. The Chamber sees no other remedy for

this, to Liege, unfortunate state of things than a diminution in the customs and transport charges attending the movement of pig-iron or refined white iron to Germany. These expenses represent actually 30 per cent. of the price which can be obtained for those descriptions of Belgian iron at Cologne. It is contended that it would be to the interest of the State and Rhenish railways to make a reduction in their charges in order to secure the continuance of this description of traffic; and it is suggested that it would be desirable, under present circumstances, to restore the expense of transport to the same rate as that charged for the carriage of iron and coals from Liege to Antwerp, about the same distance—i.e., to 6 frs. per ton at least. The Belgian Government is also counselled to secure, as regards the duties levied on the import of Belgian iron into Germany, the changes required by the fall of the sale price, and the modifications which have arisen in the relative position of German and Belgian production. In respect to the fabrication of irons of commerce, plates and rails, the Chamber expresses congratulations that Belgian establishments in general, and especially those of Liege, continue to maintain a high reputation. In all quarters to which Liege industry can forward its products without more considerable expenses than those of its competitors, and without exaggerated customs' duties, the Chamber affirms that it obtains a marked preference; but the sale price of plates and marketable irons in English establishments throughout 1860 imposed conditions to which it was difficult for Belgian industry to submit, and competition was rendered impossible in transatlantic and over-sea markets. In consequence of freights being to the advantage of England, France (by the effect of warrants), Switzerland, and Holland, by their geographical position, and the great sacrifices to which Belgian industry has submitted in order to preserve them, remain the sole markets open to Belgian plates and irons of commerce.

Perhaps our readers have by this time had enough of Belgium; we turn, then, to the Industrial Exposition at Limoges, in Central France, at which the products of thirty departments have been placed in competition with each other. M. Godefroy, jun., has received a prize for an apparatus to cleanse, wash, and concentrate alluvial minerals (*minerais d'alluvion*), such as gold, platinum, oxide of tin, wolfram, and others. But M. Godefroy, who is engineer at some metallurgical establishments in Limousin, does not confine himself to this simple task. After having at much expense, and with perils without number, accomplished a laborious examination of the placers of Australia, he has organised definitively a simple, commodious, and inexpensive system, permitting a successful treatment by washing and absolute concentration of alluvial minerals, such as gold and oxide of tin, which present themselves in well-defined and very extended bearings at various points of France. In other countries, to effect the objects aimed at by M. Godefroy, a series of engines, drags, tin-cases, frames, &c., are employed; all these arrangements are expensive, and often isolated, so that the processes, although directed by able workmen, are not (at any rate in the opinion of M. Godefroy and his admirers) all that could be desired. They require, besides, numerous dressing-floors, the providing which is an onerous affair. In countries where analogous bearings are worked the great difficulty has always been to re-unite the schams, or small impalpable mineral molecules, which amount sometimes to a fourth of the product of pounding or grinding in cylinders and by millstones. To obviate these inconveniences a machine was required uniting within itself, by means of simple arrangements, the perfections of the present apparatus; and with a difference of 20 per cent. in the workmanship: these improvements are said to be found in the machine constructed by M. Godefroy, who, compelled as he is to submit his apparatus to public gaze, is endeavouring to obtain an "act of privilege," or patent, which will secure to him the full profits of his invention.

The following official return has just been published, showing the quantities of coal imported into France during the last three years:—

	1858.	1859.	1860.
From Belgium	2,680,207	2,826,515	3,003,166
From England	1,133,923	1,166,691	1,160,586
From the German Association ..	725,124	635,084	735,472
From other sources	5,280	17,476	24,203
Total	4,544,534	4,645,766	4,921,427

These figures show a steadily increasing supply, and that, too, from other quarters besides England; and it appears probable that as "industries," to use a favourite French word, expand and advance in France, far larger imports will be required, without injury to French coalowners. The extension of the imports from Belgium seems scarcely to justify either the grumblings which we have ventilated at some length above; probably, however, the business done with France is effected at very small profits, as Frenchmen look extremely close to the francs and centimes.

GOLD IN ENGLAND.—Some time has now elapsed since the mania for working British gold mines was at its height, and doubtless many had abandoned all hope of gold mining in this country proving remunerative; it appears, however, that the repeated failures and apparently insurmountable obstacles which were from time to time met with were powerless to discourage the efforts of those who were so sanguine of the richness of the Vigna and Clogau Mines. With these mines Mr. T. A. Readwin's name will long remain closely associated, few having laboured more diligently to secure their development, and to demonstrate the profitable nature of British gold mining. About 15 months since operations were recommenced on the St. David's lode by the Vigna and Clogau Copper Mining Company, and at the beginning of the present year the lode was found to be rich enough in gold to justify the treatment of the ore for gold instead of copper, and the results obtained have fully equalled the anticipations of the proprietors. The mine is at present in very few shares, but we understand it is intended to constitute a powerful joint-stock company, in order that the property may be worked with the vigour to which the prospects presented entitle it. The second dividend of 5s. per share will be payable on Monday next, the profits on the six months' working to July 5 being calculated at 2500l. on gold alone. It is estimated that the 983 ozs. 8½ dwts. which were sold through Messrs. Sharp and Wilkins for 3664l. 5s. 7d. were raised between Jan. 5 and July 5, and no doubt is entertained that a good and regular yield will continue. Of this quantity, 230 ozs. 12 dwts. were obtained from the crushing of 179 tons 11 cwt. of poor ore from the main lode, the yield from which averaged 1 oz. 6 dwts. per ton; in this there was no visible gold. The remaining 725 ozs. 16½ dwts. were from 2 tons 7 cwt. of picked ore, with visible gold, and which gave an average of 320 ozs. of gold to the ton of ore. From the results, a successful working of the Vigna and Clogau set may be fairly anticipated.

A SALT SPRING IN A COAL MINE.—A few days ago an unusual occurrence was met with in the Dunkirk Coal Company's Astley Deep Pit, at Dukinfield. In cutting a tunnel from the Black Mine coal in a horizontal line towards the Cannel Mine, a beautiful spring of salt water, or brine, issued from a fracture in the rock; and as its remoteness from the trias and saliferous or salt-bearing strata, and also its depth of 700 yards in the carboniferous measures, may interest your geological readers, I beg to supply a careful analysis of its contents. In every 100 grains of water there were—

Chloride of sodium	4.50 grains
Chloride of calcium	0.37
Chloride of magnesium	0.26 5/13

Or about 7 ozs. (nearly half a pound) of common salt per gallon. Its specific gravity is 1.037, and boiling point 214° Fahr. But what renders it more remarkable—a fine specimen of petroleum, containing naphtha or naphthalin, floated on the surface. It was accompanied also with carburetted hydrogen, but in small quantities.

GEO. CHARLTON,
Mining Engineer, and Manager for the Company.

A NEW FUEL FOR THE NAVY.—The great advantages of using large coal of high evaporative power for steam purposes generally, and more especially for marine purposes, is universally admitted; and it will consequently be gratifying to the shipping interest to learn that the Crown Preserved Coal Company's first year's operations have been of the most successful character. The blocks of fuel manufactured by this company are of the uniform size of 1 cubic foot, and of the uniform weight of 56 lbs.; whilst the space required for stowage is materially less. To show the practical advantages of using preserved coal, the company quote an instance of a steam voyage to Rio Janeiro:—"The quantity of coals to be taken from Southampton would be 1000 tons, at a cost of about 900l., and occupying 1050 tons of space. On the other hand, 1000 tons of preserved coal would cost 100l. more, but there would be a saving of 250 tons of space, which, at the usual rate of 6l. per ton of freight, would produce 1500l. This amount would not only pay for the preserved coal, but leave a surplus of 500l. extra profit, merely for the outward voyage." Amongst the other advantages claimed for the artificial fuel, as compared with ordinary coal, are the circumstances that by the process employed the fuel is made so dry that decomposition is arrested: that it is free from dust, and

nearly as clean as blocks of stone; that it is not liable to spontaneous combustion, neither does it emit gas or smell of any kind, nor involve risk or injury of cargo, and that the evaporating power of the fuel is nearly 10 per cent. greater than any other description of coal known. The fuel has been favourably reported upon by Commander Watson, of Her Majesty's ship *Royal Albert*, and has been extensively used by several of the large steam navigation companies.

THE NORTHERN INSTITUTE OF MINING ENGINEERS.

The annual general meeting of members was held in the rooms of the Institute, at Newcastle-on-Tyne, on Thursday, the President, Mr. NICHOLAS WOOD, in the chair. After the routine business of electing members, the Report of the Council of Management for the past year was read. In their report the Council, after congratulating the members on the general and increasing success of the Institute, gave a slight *resumé* of the Papers read during the past year, and of the discussions arising thereon.—On PILLAR WORKING, by Mr. T. Crone; supplementary paper on the MANUFACTURE OF COKE, by Mr. Stevenson; CEMENT WALLING FOR SHAFTS, by Mr. W. Watson; VENTILATING FURNACES, by Mr. W. Armstrong; the EXPLOSION OF HETTON COLLIERY, by the President; CONSTRUCTION OF VENTILATING FURNACES, by Mr. John Daglish; STRENGTH OF TUBBING IN SHAFTS, by Mr. John Atkinson; MOUNTAIN LIMESTONE SERIES OF NORTH NORTHUMBERLAND, by Mr. E. F. Boyd; and MEMOIRS of the lamented Vice-Presidents, the late THOMAS JOHN TAYLOR and JOSEPH LOCK, by the President. The report noticed at some length the appointment of the Commission of Enquiry into the Durham University, and recommended the appointment of the President, Messrs. J. L. Bell, and J. T. Woodhouse, to give evidence on the part of the Mining Institute before the Commission. Considerable discussion ensued on various matters referring to the Institute, and amongst others the appointment of an additional secretary, and the advisability of increasing the number of vice-presidents, in order to secure to the Council of Management the services of many gentlemen of eminence in the profession, who, from their residing at too great a distance, or from their numerous business engagements, cannot attend with the regularity essential as ordinary members of the Council.

A valuable paper was then read by Messrs. JOHN J. ATKINSON, Her Majesty's Inspector of Mines for Durham, and JOHN COULSON, on SHAFT TUBBING. This paper, which will appear in the Transactions of next year, was accompanied with elaborate plans explanatory of several interesting cases which have been met with in sinking various pits. Amongst these may be mentioned that of a recent winning in Westphalia, conducted under the superintendence of Mr. Coulson, where after a feeder of water near the surface had been tubbed off, and the sinking progressed several fathoms deeper, another feeder was met with, which rose through a pipe to some feet above the surface, the first feeder never rising within some distance of the surface, showing that there was no connection whatever between the sources of these feeders. Another curious case was mentioned as having been met with in the sinking of South Wingate Colliery, near Durham, where a feeder near the surface was tubbed off, and on sinking deeper the usual heavy sand feeder of the district was met with, and also tubbed back, and the water was then run down from the first tubbing in behind the second tubbing, without ever raising the general level of the latter, or causing it to run over.

Mr. JOHN DAGLISH, of Hetton, also read a paper on the DESTRUCTIVE ACTION OF FURNACE VAPOURS IN UPCAST SHAFTS. After describing the curious transformation which metal tubbing in upcast shafts undergoes, the iron being reduced from a metallic state into a substance of plumbago-like character, and giving a chemical analysis of the resultant, the paper proceeds to give various chemical analyses and descriptions by other writers, of iron which has been affected in a similar manner by other agency, as by the action of sea water, gas-leakage, &c., which show a striking resemblance, and which are in effect identical with the subject of the paper, the action in all cases being the removal of the metallic iron, leaving behind the carbon and other impurities. The paper then proceeds to notice the destructive action of the furnace vapours on other materials besides iron, when exposed to their influence, and concludes by remarking on the various methods for protecting tubbing and walling. Mr. Daglish advocates the use of coal-tar for this purpose.

THE SCHOOL OF MINES—BRISTOL.

The results of the late examination of the pupils by the "Department of Science and Art" are now made known. They are as follows:—

MECHANICAL PHYSICS.

EDWARD COLLINS ..	Third Class Prize.	W. ROBATMAN	Passed.
GEORGE GILFILLAN ..	Third Class Prize.	J. EARDLEY	Passed.
JOSEPH HALE	Third Class Prize.	THOMAS JONES	Passed.
HENRY JONES	Passed.	JAMES DYER	Passed.

GEOLOGY.

W. ROBATMAN	{ First Class Prize and Silver Medal.	J. EARDLEY	Third Class Prize.
GEORGE GILFILLAN ..	Second Class Prize.	JOSEPH HALE	Third Class Prize.
		JAMES DYER	Passed.

MINERALOGY AND MINING.

GEORGE GILFILLAN ..	Second Class Prize.	JAMES DYER	Passed.
W. ROBATMAN	Second Class Prize.	JOHN EARDLEY	Passed.
JOSEPH HALE	Third Class Prize.		

CHEMISTRY.

W. ROBATMAN	Third Class Prize.	J. EARDLEY	Passed.
G. GILFILLAN	Passed.		

When we take into consideration the short time during which some of the students have attended the school, and the small amount of preparatory knowledge possessed by many, we cannot but regard the above results as extremely satisfactory. Although the examination papers were certainly not very difficult, still they required a very accurate and extended knowledge of the several sciences, and were well calculated to test the proficiency of the candidates, and the soundness of the instruction which has been imparted to them. The success of Joseph Hale deserves especial notice, as it may serve as an example to others in a similar position. Until the late explosion, he was a working collier at the Black Vein Pit, at Risca, and has attended the school but a few months, and too much praise can scarcely be bestowed upon him for the attentive and persevering way in which he has pursued his studies, even amidst many difficulties and disadvantages.

EDUCATION FOR MINERS.—The youths and miners who have been pursuing their studies under the auspices of the Miner's Association of Cornwall and Devonshire appear to have met with a very fair amount of success at the Committee of Council on Education's annual Science Examinations, just concluded. In the class of Mechanical Physics, H. Middleton, of South Downs, Redruth, aged 22, has received a second-class silver medal for theoretical, and a first-class Queen's prize for applied mechanics; and a first-class Queen's prize has likewise been awarded to Henry C. Carnele, of Redruth, for applied mechanics. Henry Williams, jun., Truro, received a first-class silver medal for mineralogy and its application to mining, and a second-class Queen's prize for inorganic chemistry. Second-class Queen's prizes were also obtained by James Roach and Richard Searle, of St. Just, for mineralogy and its application to mining, and by W. D. Hocking, of Redruth, for applied mechanics. Third-class Queen's prizes were awarded to Alfred Blenkinsop, of St. Agnes, and to R. B. Scudle, of St. Just, for inorganic chemistry, and to Wm. Semmons, jun., of Redruth, for theoretical mechanics. In addition to these, John Bryant, of St. Agnes, and James Roach, John Rowe, and William Rowe, of St. Just, passed their examination in inorganic chemistry, and Wm. D. Hocking, James Wickett, and R. W. Ruckard, of Redruth, in theoretical mechanics. In mineralogy and its application to mining, John Hancock, jun., of St. Agnes, and John Rowe, of St. Just, obtained third-class Queen's prizes, and Alfred Blenkinsop, John Bray, John Bryant, and R. Davies, of St. Agnes, and William Rowe and William White, of St. Just, passed the examination. This list cannot but be regarded as satisfactory, when it is considered that the Miner's Association was not in working order at the beginning of the year, and that the examinations were held in May and June. That courses of instruction extending over only three months should have enabled the students to have passed with such brilliant results reflects the highest credit upon the teachers, and proves both the advantages which may be anticipated from the association, and the desire and ability of Cornishmen to profit by the facilities offered them for acquiring an adequate amount of sound scientific instruction. Of the 725 papers passed, 25 were forwarded from students who received their training under the auspices of the Miner's Association, and two of the silver medals were awarded to Cornishmen—Mr. Williams, jun., of Alma, Truro, taking

a first-class for mineralogy and its applications to mining; and Mr. Middleton, of Bassot Mine, Redruth, a second-class for theoretical mechanics. Such being the results of the first year's efforts, we cannot doubt but that continued exertions on the part of the teacher will ensure the Miner's Association of Cornwall a position of which all connected with it may be proud.

REPORT ON CORNWALL AND DEVONSHIRE.

[FROM OUR CORRESPONDENT IN THECRO.]

AUG. 7.—An absence of a few months from the county—principally passed among the mining districts of Wales and the North of England—has given me a good opportunity of comparing the present position and prospects of Cornish mining with that of metallic mining in other parts. At the present time Cornish mining, in common with almost every important interest in the kingdom, is suffering from great depression. The stagnation which the civil war in America has brought about in all branches of trade makes such a depression inevitable, and, indeed, natural. A limitation of trade, and a restriction of manufacturing enterprise, necessarily contracts the consumption of metals, and sends down their prices; and this fall ultimately comes on the miner. But besides this legitimate source of depression, a large branch of mining enterprise—that is, speculative mining—suffers even still more from the decay of speculative feeling incident to times of depression; and this really brings more consternation to brokers and share markets than would be caused by the greatest possible fall in the price of metals. Let us see how these two causes of depression are likely respectively to affect the position of Cornish mining.

No business class suffers more irreparable damage from a permanent fall in prices than the mining interest, for they must bear almost the whole of the loss without having any one to fall back upon. If prices are lower with the manufacturer or smelter, he meets it by giving less for the raw material; and even with farmers a permanent fall in the value of agricultural produce must ultimately be met by a reduction of rents. But whether metals are high or low the miner will now have to give pretty much the same for his materials, for their prices are regulated by a demand, to which his only bears an insignificant proportion; and in the item of labour, also, the demand is now so great from every quarter that but a trifling reduction can, under any contingency, be made there. Consequently, if there were any possibility of a permanent fall in the prices of metals, the prospect would be a bad one for Cornish mining. But there is really no probability of anything of the kind. Never, in the whole history of the human race, was there a prospect of such boundless material prosperity for every part of the world. On all sides new countries, teeming with natural wealth, and old countries, equally teeming with population, are being opened up to the industry and enterprise of European commerce. If it were not for a mania for war and destruction, which, like a madness, seems to have seized simultaneously upon such a large portion of mankind, the present prosperity would be beyond anything yet imagined. The only wonder really is that, considering the political state of the world, trade and manufactures are so little interrupted, and continue to be so soundly prosperous, as they are: it can only be due to the fact that the world is so substantially prosperous, that all these wars, rumours of wars, and ruinous armaments fail materially to check it. Suppose, 20 years ago, anyone had conceived such a political state of things as we are now, or have been recently, going through—civil war, on a gigantic scale, in the United States; Mexico and the Southern Republics in helpless anarchy; a desolating war in China; an unparalleled mutiny and rebellion just subdued in India; and Europe arming to the teeth—what would have been the result predicted to manufactures and trade? Why, ruin—utter ruin; and yet, notwithstanding all this, we have been, and are, doing marvellously well—a sure sign that the wealth and prosperity of the world is increasing in such a ratio as to counterbalance all disturbing warlike causes, and so as soon, it is to be hoped, to defy and control them.

With such prospects of unparalleled prosperity for the whole world, the mining interest of Cornwall can have no fear of any permanent depression of prices. Notwithstanding all likely discoveries in new countries, the probability is that, far from falling, the prices of metals will still advance. Yet serious fluctuations must at times be expected, from temporary depressions of trade. Last year black tin was selling for upwards of 80s. per ton, with a rising market; and a large proportion of the miners in the county were calculating upon its going to 100s. Several mines were put to work avowedly in consequence of the high prices; mines which, it was admitted by all, could not be made remunerative at any great reduction. The fall which has already taken place has been a great blow to these hopes. Men were so confident in the necessarily increased demand for tin, arising from increased wealth and industry, coupled with its restricted areas of production, that they almost ceased to contemplate the possibility of its ever falling again. They told tales of selling tin at 35s. or 40s. per ton as a man would tell of his travelling from London in a stage-coach, as a curiosity, entirely passed away. The fall that has taken place has, with many, caused an excessive reaction in the other direction; and they are almost beginning to fancy that the old days of 35s. or 40s. per ton may come back again. There need be no apprehensions of anything of this kind; the fall that has taken place shows nothing to justify any such fear, for considering the stagnation of trade, it has not been excessive. Consequently, so far as the price of metals is concerned, there seems no good reason whatever to fear any such permanent fall as would seriously injure Cornish mining industry. Prices must fluctuate with the fluctuations of trade; but the depressions may be expected to be merely temporary, and certainly afford no adequate grounds for sacrificing any mining property, because it admittedly requires high prices to make it remunerative. If one is satisfied that with such prices it will be really remunerative, I should say hold on by all means, for these prices will, and must, come again before very long. The depression which arises from the decay of speculative feeling, and which chiefly affects new or market concerns, is a matter of much less consequence to legitimate mining. That a speculative spirit is to a certain extent necessary to give a full development to mining industry is, no doubt, perfectly true; but it may very well be pushed too far. It would be a matter for unqualified satisfaction if the present depression were the means of weeding out the market by the stoppage of a lot of hopelessly poor concerns—concerns without the ghost of a chance, and which are really not even worked in such a manner as to produce any possible result, but which are lingeringly dragged on for the sake of the most petty objects, or for want of moral courage to stop and acknowledge a loss. Such things drain the resources of those that are willing to speculate, consume labour and materials uselessly, bring discredit upon the name of mining, and all without any proportionate benefit to any person. As it is well to see that some good comes out of evil, it is satisfactory to observe that the existing depression is really doing good by bringing a few concerns of this class to an end; still there is plenty of scope yet in this direction. In some districts there is no doubt that the simultaneous stoppage of several concerns might bring about a panic, and involve the whole district in ruin. This has frequently occurred in times of panic, in the case of some Welsh districts, which, although affording excellent prospects, have been almost entirely abandoned, in consequence of the contagion caused by the stoppage of two or three concerns. But there is no danger of anything of that kind in Cornwall. No piece of ground of known and admitted merits is likely to remain there very long untended; and no amount of "knocking" of poor mines will affect the prospects of those worthy of a fair trial. Last year all the deep old mines in the county were going to work. At present I think our views are a little sobered; and if, as we must do, we attribute this to the recent depression, it will have been the means of doing very great benefit to the county, or at least of saving it from a great deal of loss and discredit.

The proverb which says that "comparisons are odious" contains a great deal of truth, and consequently I shall not attempt to institute any parallel between Cornish mining and metallic mining in other parts of these kingdoms. But, whatever may be the merits or demerits of Welsh or other mines, as private concerns to be worked out by individual enterprise, I think that the experience of the last 15 or 20 years show that they cannot attempt to vie with Cornish mines in an open market. The fact is, that it is only the mines of a very few districts that can, from their very nature, ever become really marketable commodities—become worth, for instance, any definite number of years' purchase. Districts in which the ore makes with sufficient regularity as to enable you, more or less approximately, to judge of its prospect of continuance are very rare; and except in such districts—of which Cornwall is the greatest in the world—it is practically impossible to fix a value for shares within such a limit as to make a regular market possible. Of course, a thing of the kind may be attempted now and then, and may be carried on for a time, but in ninety-nine cases out of a hundred it ultimately falls through. Consequently, for "outside" shareholders—for those who live away from the district, and judge of the prospects and value of mines by what transpires in a market—Cornwall must always offer a securer locality for mining speculation than any other dis-

trict that can possibly be found; and this fact alone will secure it such a preference among speculators as to ensure at all times an ample supply to capital for developing its boundless mineral resources.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

AUG. 8.—The Iron Trade in this district is, if anything, a shade better than it was. Some of the leading ironmasters are fairly employed, but generally the trade is very dull, and the feeling on 'Change at Wolverhampton and Birmingham this week was somewhat more depressed, on account of the news of the defeat which the Federal forces have suffered. Opinions differ as to the result of that event, but the general opinion is that it affords an illustration of what most thoughtful men have felt—that the subjugation of a numerous and determined people, inhabiting a vast extent of country, is an impossible task, and that either an amicable arrangement or a separation must be the conclusion of the quarrel. How far distant either of these results may be it is not for any one to guess. Meanwhile trade languishes and will languish, and great suffering must, it is to be feared, ensue in this country as well as in that in which the war is actually raging. The Hardware Trades of the district continue much as they were. In one or two trades there are rather more orders, and there is more heard of the French trade. At present the goods sent to that country are necessarily only an experiment, but the dulness of trade in general induces merchants and manufacturers to push trade in any direction in which there is any chance of extending it.

The incidence of the Truck Acts formed the question in dispute in an action heard before Mr. McMahon, of the Oxford Circuit, to whom it was referred. The plaintiff, Mr. Caswell, a master sinker, had been employed in sinking pits at Moxley, near Bilston, and other places for the defendants, Messrs. Groucutt and Sons, ironmasters, &c., and sued them for 502l. 15s. on this account. The plaintiff employed men under him to do the work, and occasionally assisted himself, and was paid by measure and by day, according to the nature of the sinking. His claim was the balance, as he alleged, of his work after excluding upwards of 500l., which sum he contended was payment in truck. The defendants paid 4l. into Court, which was a little more than the balance, as they alleged, of the last reckoning, and which plaintiff had never called to receive. The main questions for the arbitrator were, whether the plaintiff was an artificer or labourer under the Truck Act, and bound to bestow his own services in the work done; and if so, whether cash paid to his men on his account, at his request, part of which was expended at defendants' shop, and goods supplied to defendants for which he had refused to give credit, were to be set off against his claim, or were legal claims under the Act. It was contended by defendants, that plaintiff did not come within the definition of an artificer under the Act, "as a person employed in getting or working in mines of coal or stone," though he might sink through both strata, and raise coal and stone from the shaft in sinking, and that he was a mere contractor, not bound to work personally, and obtained a profit on the labour of his men. Several cases were cited in support of the plaintiff's and defendants' views, and ultimately they both agreed to abide by the arbitrator's decision on the law, though either had the option of asking him to grant a case for the opinion of the Court of Exchequer.

This was another illustration of the danger of legislation which interferes with free action in trade. Nothing could be better meant than the Truck Acts, but probably no one could be found to justify the application of them in this case.

In another column appears a list of Blast Furnaces in and out of blast, extracted from Mr. Samuel Griffiths's "Iron Trade Circular," which shows that the number of furnaces out of blast in this district is much larger than it was. This will appear more strikingly if we compare the number of furnaces in blast with the number in operation at previous periods, as shown in the following table:—

	In blast.	Out of blast.	Total.
1857. September	157	22	179
December	111	69	180
1858. December	132	51	183
1859. December	138	50	188
1860. December	99	93	192

In explanation of this table, it may be well to remind the reader that the statement for September, 1857, refers to the period of great activity preceding the crisis of the autumn of that year, which caused the blowing-out of 46 furnaces by December. At the present moment, while there are in South Staffordshire and East Worcestershire 13 more blast-furnaces in existence, there are actually 22 less in blast than at the close of 1857, when bankruptcies were taking place by scores, when the principal bank in Wolverhampton had stopped payment, and the whole country was in a state of commercial prostration. The diminution in the number of blast-furnaces in operation may, however, be to some extent explained by the increased importation into the district of hematite and other pigs.

THE IRON TRADE—FURNACES IN AND OUT OF BLAST.

We are indebted to Mr. Samuel Griffiths, of Wolverhampton, for some valuable statistical information, explanatory of the present state of the iron trade. These returns are of very great value, and we intend to publish them entire in the Journal, as not only of present interest but worthy of recording for reference. We have not space for all the returns this week, but in our next Journal shall complete the series, and then place our readers in possession of as accurate a view of the iron manufacturing industry of the country as can possibly be procured.

WOLVERHAMPTON AND BILSTON DISTRICT.

	Furnaces.	In.	Out.
Addenbrookes, Smith, and Pidecock, Rough Hay	3	1	2
Ashton, Isaiah, and Co., Wolverhampton	3	0	3
Bagnall, John and Sons, Parnfield	2	0	2
Bagnall, John and Sons, Gals Green	3	1	2
Baldwin, William and Co., Boverux	2	0	2
Banks, Thomas and Son (late), Barber's Field	2	0	2
Bennett, William, Oldbury	4	4	0
Blackwell and Co., Bilston New	5	0	5
Chillington Company, Chillington	4	3	1
Chillington Company, Moseley	3	0	3
Chillington Company, Bentley	2	2	0
Cobourn, John and Sons, Horsley	4	2	2
Cresswell, Edward and Sons, Tipton	2	0	2
Davies, Bicomer, and Co., Pelsall	2	2	0
Fryer, William F., Esq., Hatherton	2	1	1
Fletcher, Solly, and Urwick, Willenhall	3	2	1
Griffiths, Samuel, Bilston Brook	3	0	3
Gibbons, Benjamin, Millfields	4	4	0
Groucutt, Samuel and Sons, Broadwaters	3	3	0
Giles, Frederick (late), Stour Valley	1	0	1
Hopkins, John and Son, Dudley Port	2	2	0
Haines, Job and Henry, Willingsworth	3	2	1
Hickman, G. H. and A. (late), Stonefield	1	0	1
Jones, David, Herborn, Park	3	2	1
Jones and Murrell, Bilston	5	1	4
Jones, John, Birchills	5	1	4
Lloyds, Fosters, and Co., Wednesbury Old Park	3	3	0
Mills, Samuel, Darlaston Green	3	3	0
Morris, Thomas, Park Lane	2	1	1
Mottram and Deely (late), Toll End	2	0	2
Osier Bed Iron Company, Osier Bed	3	2	1
Onions, W. J. and G., Stour Valley	1	1	0
Parkfield Iron Company, Parkfield	5	4	1
Pemberton, Thomas H. (late), Deepfields	3	0	3
Perry, F. Charles (late), Rowleywood	2	0	2
Roberts and Company, Tipton Green	4	2	2
Sparrow, W. and Co., Stow Heath	4	2	2
Thornycroft, G. B. and Co., Bradley New	2	2	0
Thomson, G. and Co., Crook Hay	4	0	4
Turley, Josh. and Thomas, Coseley	3	2	1
Williams, Philip and Sons, Wednesbury Oak	3	2	1
Williams, Philip and Sons, Union, West Bromwich	3	2	1
Williams Brothers, Birchills	2	0	2
Ward, William and Sons, Priestfields	2	2	0
Ward, William and Sons, New Priestfields	2	1	1
Whitehouse, H. E., Priorfields	3	2	1
Total	130	67	63

DUDLEY DISTRICT.

Blackwell and Co., Russell's Hall	5	1	4
Bradley, John and Co., Shut End	4	2	2
Radger, Thomas and Isaac, Old Hill	2	0	2
Cochrane and Co., Woodside	3	2	1
Dudley, Earl of, Coneygrove	3	2	1
Dudley, Earl of, Leval	3	2	1
Dawes, W. H., Withymoor	2	2	0
Evers and Martin, Park End	2	1	1
Firmstone, W. and G., Oak Farm	2	2	0
Firmstone, W. and G., Lays	13	3	10
Griffiths, Samuel, Old Windmill End	3	2	1
Gibbons, Benjamin, Kelleys	2	0	2
Gibbons, Benjamin, Corby's Hall, New	4	2	2
Hall, Holcroft, and Pearson, Brettle Lane	2	2	0
Hall, Holcroft, and Pearson, Old Level	2	1	1
Haden, William, Dixon's Green	1	0	1
Hingley, Noah and Sons, Netherton and Dudley Wood	6	2	4
Matthews, William, Corby's Hall	4	2	2
New British Iron Company, Congreaves	6	2	4
Total	62	32	30

SHROPSHIRE.

Botfield, Beriah, Esq., M.P., Dark Lane	2	1	1
Botfield, Beriah, Esq., M.P., Hinkshay	2	0	2
Botfield, Beriah, Esq., M.P., Langley Field	1	0	1
Coalbrookdale Company, Dawley Castle	2	2	0

* Three of these furnaces are about to be taken down.
† One now being blown out.

SHROPSHIRE—(Continued).

	Furnaces.	In.	Out.
Coalbrookdale Company, Horsehay	2	0	2
Coalbrookdale Company, Lawley	1	1	0
Coalbrookdale Company, Lightmoor	2	2	0
Foster, William Orme, Esq., M.P., Madeley Court	3	2	1
Ketley Iron Company, Ketley	2	1	1
Lilleshall Iron Company, Lilleshall	8	8	0
Madeley Wood Company, Madeley Wood	3	3	0
Old Park Iron Company, Old Park and Stitchley	4	2	2
Total	32	23	9

FOREST OF DEAN.

Cinderford Iron Company, Newnham	4	2	2
Forest of Dean Iron Company, Park End	2	1	1
Gibbons, Benjamin, Souley	2	0	2
Ebbw Vale Company, Oakwood	1	0	1
Total	9	3	6

NORTH STAFFORDSHIRE DISTRICT.

Fenton Park Iron Company, Fenton Park	2	0	2
Granville, Earl, Shelton	8	6	2
Heathcote, John Edensor, Apedale	4	3	1
Heath, Robert, Esq., Biddulph Valley	3	2	1
Kinnerley, T., Esq., Trustees of late, Clough Hall	4	2	2
North Staffordshire Coal and Iron Company (Limited), } Talk-o'-the-Hill	2	0	2
Sparrow, W. H. and Son, Longton, Land End	3	2	1
Silverdale Company, Silverdale	4	2	2
Williamson Brothers, Goldendale	4	2	2
Total	31	19	15

STOCKTON AND DARLINGTON DISTRICT.

Bolckow and Vaughan, Cleveland	9	9	0
Bolckow and Vaughan, Middlesboro'-on-Tees	3	3	0
Bolckow and Vaughan, Wiltton Park	4	4	0
Bell Brothers, Port Clarence-on-Tees	6	4	2
Brenkburn Iron and Coal Co., Morpeth, Northumberland	1	0	1
Beasley, Joseph, Jun., Hailwhistle	1	0	1
Cochrane & Co., Ormesby Iron Works, Middles-on-Tees	4	3	1
Clay Lane Iron Company, Clay Lane, Easton	3	2	1
Darlington and Consett Iron Company (Limited), Consett	18	8	10
Gilkes, Wilson, Pease, and Co., Tees Iron Works	5	2	3
Holdsword, Benington, and Co., Stockton-on-Tees	3	2	1
Hopkins and Co., Tees Side	2	2	0
Irwin, Thos. R., Esq., Bedlington, Sunderland	2	0	2
Jones, Dunning, and Co., Normauby	12	0	2
Marchioness of Londonderry, Vane & Seaham Iron Works	2	0	2
Samuelson, B., and Co., South Bank Furnaces	3	2	1
South Durham Iron Company, South Durham	3	2	1
Union Bank, Newcastle, Hareshaw	33	0	3
Weardale Iron Company, Tow Law, Weardale	8	3	2
Weardale Iron Company, Stanhope, Weardale	3	0	3
Warners, Lucas, and Barrett, Norton Furnaces	3	0	3
Whitwell, William, and Co., Thornaby	3	0	3
Total	86	48	38

NORTHAMPTONSHIRE.

Butlin, Thomas, and Co., East End, Wellingboro'	1	1	0
Pell, George, Heyford	3	2	1
Total	4	3	1

WILTSHIRE, &c.

Chick, George, Pennywell Road, Bristol	1	0	1
Knight, Edwin, and Co., Ashton Vale, Bristol	1	1	0
Sart and Co., Seend	1	2	0
Westbury Iron Company (Limited), Westbury	2	2	0
Total	6	5	1

DERBYSHIRE DISTRICT.

Appleby and Co., Renishaw	2	1	1
Barrow, Richard, Esq., Staveley	2	2	0
Butterley Iron Company, Butterley	7	5	2
Beale, Samuel, and Co., Newbold	1	1	0
Clay Cross Company, Clay Cross	1	1	0
Dunston and Barlow Company, near Chesterfield	3	1	2
Knowles, John, Brimington	1	0	1
Mold, W. H., Alderwasley and Morley Park	12	2	0
Oakerthorpe Iron Company, near Alfreton	2	1	1
Oakes, James, and Co., Alfreton	3	2	1
Rangleley, Henry, Unstone	11	0	1
Stanton Iron Works Company, Stanton	3	2	1
Whitehouse, H. E., and Sons, West Hallam	33	2	1
Wingerworth Iron Company, Wingerworth	3	1	2
Total	96	22	14

SYNOPSIS OF FURNACES IN AND OUT OF BLAST IN GREAT BRITAIN, up to July of the present year:—

Districts.	Furnaces.	In.	Out.
Wolverhampton and Bilston district	130	67	63
Dudley district	62	32	30
Shropshire	32	23	9
Forest of Dean	9	3	6
North Staffordshire	34	19	15
Stockton and Darlington	25	13	12
Newcastle-on-Tyne	23	13	10
Lancashire and Cumberland	30	16	14
Yorkshire	36	25	11
Northamptonshire	4	3	1
Wiltshire, &c.	6	5	1
Derbyshire	36	22	14
Total	486	276	210
South Wales	207	125	82
North Wales	15	4	11
Scotland	174	110	65
Total	882	524	358

† One of these partly down. † Just complete, and about to blow in.
‡ Out for the last 13 years, and now for sale.
§ Nearly complete. † Will be put in shortly.
† These furnaces are going out of blast for a short time, with a view of applying apparatus for utilising the gases.
‡ Cold blast. † Out for repairs. † Turning one to cold blast.
[To be completed in next week's Mining Journal.]

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

AUG. 8.—The decisive intelligence of a battle in America, though long delayed, has come at last, and that confirming our worst suspicions as to the future of our trade with that country. The last advices from the States are very disheartening, and it is almost impossible to expect anything like regularity in orders or remittances. There is less enquiry for rails than has been experienced for some time past, but merchant bars have been in request, and the orders for plates for shipbuilding have been on the increase. The demand for export has been steady, but for home consumption there has been but little enquiry for any description of manufactured iron. The Coal Trade is duller than for some time past, and the demand has been much less than usual, owing to the generally depressed state of trade. The stocks in hand are large, and with the exception of those coalmasters who have heavy contracts to execute, there is a general inactivity observable.

The inquest at Clay Cross has been brought to a conclusion after eight days' sitting, and the examination of 73 witnesses. The accident was a simple one, though fraught with terrible results, and much of the evidence which was taken was of a corroborative character. The witnesses at the last two sittings were gentlemen chiefly engaged in mechanical and mining engineering. The Clay Cross Company determined to produce as witnesses some of the most experienced men. Mr. Howe, the engineer to the company, described the mechanical arrangements for lifting the water out of the mine by tubs, which was the most effectual mode of raising it. In this opinion Mr. Howe was fully corroborated by other engineers. Mr. Binns, the manager of the works, gave evidence of the commencement and closing of the old works, which were commenced in the lifetime of the late George Stephenson, under whose direction they were principally carried out. The barriers of coal left against the pressure by Mr. Binns were considered to be ample, and Mr. Hedley, the Government Inspector, gave an opinion that they were sufficient without boring, assuming the old plan to be correct. Mr. J. T. Woodhouse, Mr. Jeffcock, of Derby, and Mr. W. Bean, of Alfreton, Mr. R. G. Coke, of Ankerhold, all mining engineers, considered that the barriers were amply sufficient. Mr. Hedley entered into a long deposition of what had been done from the first occurrence of the accident. He had agreed, at the request of the company, to take the management of the operations until the bodies were recovered, and for that purpose the barriers which had been left, assuming the plans to be correct, and he had no colliery in his district which was better managed in regard to everything for ensuring the preservation of

Inspector, with a view to provide for the safety of the mine; and they consider it desirable in all such cases for coalowners to drain the old workings on the property they are working.

On the delivery of the verdict, Mr. Wm. Jackson, M.P., with tears in his eyes addressing the jury, said:—"On behalf of the Clay Cross Company, I cannot allow this meeting to separate without expressing my deep regret, and of everyone concerned, for the lamentable loss that has taken place. I can assure you that each and all of us have felt most severely. We feel your verdict has, in public opinion, rendered us blameless. We do feel for the loss of life and for the families, and for the great loss they have sustained; and we only hope that such a circumstance may never occur again. It was our pride to think that these works had been conducted in such a manner as to cause scarcely any loss of life, and we have congratulated ourselves that, under the able management of Mr. Binn, we had less loss of life than any colliery in the kingdom, considering the magnitude of the works. It has ever been our wish to make men in our employ comfortable, and to ensure their safety. We cannot repay our friends and neighbours for the great interest they have taken in this lamentable affair, for the kindly offers of aid we have received, and the attention you, gentlemen, have paid to the case, and for the great amount of time you have lost over it. We must express our deep sense of gratitude to you, and I hope that steps may be taken to ameliorate the extent of the sufferings of those families who have been bereaved in consequence. I am sure it shall not be our fault. I can scarcely express myself. I hope it will be the last time you will be assembled under such circumstances."

We hear that a company of gentlemen has been formed, under the Limited Liability Act, to work a coal field at Sheepbridge, consisting of about 600 acres. The coal has been let by Mr. Fowler, one of the proprietors of the Sheepbridge Works. We incline to the opinion that the company will be a prosperous one, inasmuch as the proprietors of the Sheepbridge Works might become large purchasers, their own colliery not yielding coal sufficient for their blast-furnaces.

The railway dividends look healthy, considering the general depression of trade. The Midland dividend, of 6½ per cent., shows the steady increase of traffic, more especially in minerals. The South Yorkshire will pay 4½ per cent., though the mineral traffic has not been so good owing to the depressed condition of manufacturing trades generally.

REPORT FROM MONMOUTH AND SOUTH WALES.

NEWPORT, CARDIFF, AND SWANSEA, AUG. 8.—The colliers of Risca, Abercarn, and the neighbourhood, held a meeting on Thursday evening, at the Old Bridge, Risca. About 300 were present, and the few men that were working at the Black Vein were sent for, and remonstrated with on their conduct in undermining the exertions of their fellow-workmen, by going in at the reduced prices. This had the effect of eliciting a promise from those who had resumed work, that they would not go in again until matters were settled. The men have had several meetings since, and it appears that Mr. Palmer, the manager, has offered to terminate the dispute by resuming work at the old prices, and the company will also employ timbermen for putting up the brattice. This has hitherto been done by the colliers, and consequently the offer now made is highly advantageous to them. Intoxicated by their presumed victory over the masters, the men refuse to go in even at these terms, their chief objection being the proposed employment of timbermen, or sub-freemen. The managers, as may be expected, have determined to get men elsewhere, and this is no difficult task in these days of stagnation, unless the old hands will resume work without delay. It is to be hoped the good sense of the colliers, for their own sake, will predominate over their ambitious and domineering spirit on this occasion. It is in contemplation to form a company for the purpose of working the Llanllyan and Llanharly Mines, situated near the South Wales Railway. Several influential men have already signified their intention of assisting in the scheme.

The tract of country traversed by the Ely Valley Railway is fast becoming a prosperous mining district. Messrs. Peters and Wootton have succeeded in winning the Bryn-craddock four-foot coal, which is one of the Llanvill series. Mr. Thomas Edmunds has also succeeded in winning the same seam on the Tychea. Messrs. Fowler, the extensive coal proprietors, have become lessees of the coal under Ffynon Rhyngill, near Eglwysilan Church, and the produce, which it is expected will be of the best house and gas quality, will be conveyed by the Glamorganshire Canal to Cardiff for sale and shipment.

On Wednesday, a meeting of the committee of the South Wales Institute of Engineers was held at Merthyr Tydfil. Mr. Lionel Brough, Her Majesty's Inspector of Mines, occupied the chair. It was determined that the next meeting should be held at Swansea on Friday and Saturday, Sept. 13, and 14. The meeting would be held at the end of August, but as the Cambrian Association meets about that date, the committee wisely determined that the two gatherings should not be held at the same time.

At Llanelli, the Coal and Iron Trades are in a very active condition. At the commencement of this week there were about seventy vessels in the port, and amongst the number were several large barques of from 400 to 600 tons. The majority of these vessels are taking cargoes of coal in for different home and foreign ports. The general activity which prevails throughout the whole neighbourhood proves that Llanelli suffers but little at the present time from the general depression which prevails, and that it is soon destined to be a very important place.

A meeting of the Monmouthshire Prize Association was held at the Town Hall, Newport, on Wednesday. The Association has now been established six years, its object being to award prizes to deserving children in the elementary schools of the county. The Association is principally supported by the ironmasters of the district, and the scheme has effected a large amount of good, particularly amongst the mining population of the district. Sir Thomas Phillips occupied the chair, and there were also present Messrs. Thos. Brown, Edw. Vale, F. Levick, Blaina; T. W. Pium, Blaenavon; J. Luth, Newport; T. Cordes, Dos Works, Newport; H. M. Kennard, Crumlin, and a number of clergymen, ministers, and gentlemen. The Chairman said that the present examination showed that the scheme had worked well, and the number of children who competed, and the proportion that received prizes, had nearly doubled since 1857. Votes of thanks were passed to the examiners for their valuable labours, to the ironmasters for their liberal support, &c. After the public meeting the successful children, 340 in number, were awarded various prizes and certificates of merit. The Monmouthshire Railway Company conveyed the children and teachers from all parts of the county free of charge. This act of liberality was warmly commended at the meeting. The prizes having been distributed, the supporters and friends sat down to a first-class spread at the Westgate Hotel, and the children also were well provided for.

An accident occurred to a collier named William Thomas, working at the St. David's Pit, Llanelli. While engaged in his usual avocation underground, a large stone fell on him, and he received some severe injuries. He was immediately conveyed out, and Dr. Thomas attended him. The unfortunate man is progressing favourably. An inquest was held at the Bridge Inn, Gwlltrefydd, on the bodies of John Morgan and Isaac Charles. From the evidence, it appeared that the deceased men were employed at the Great Western Colliery, and they met their death by a stone falling from the top. The jury returned a verdict of "Accidental Death." It is a remarkable fact that this is the only fatal accident which has occurred in this colliery since 1855—six years since. Both the coroner and jury expressed themselves highly pleased with the care, irrespective of expense, which had been shown for the preservation of human life.

The following are the particulars of the Neath shipping trade for the month of July:—Imports: Number of vessels, 238, of 19,719 tons; 7358 tons of iron ore; 1062 tons of pig-iron; 3413 tons of copper ore; 29 tons of block tin; 649 loads of timber and deals; 470 tons of flour; 2287 quarters of oats; 167 tons of pitwood, and sundry goods. Exports: 22,328 tons of coal and culm; 850 tons of bar and railway iron; 175 tons of copper; 75 tons of tin-plates; and 83,000 fire-bricks.

BRISTOL.—There has been an unaccountable falling off in the exports of coal to foreign parts from the port of Bristol during the month of July, as compared with the preceding month. In June the over-sea exports were 2785 tons, but in July only 769 tons, thus showing a decrease of 2016 tons in the exports. The following are the places to which the exports were made in July:—Dantzic, 150 tons; Tobago, 70 tons; Matanzas, 147 tons; Cuba, 69 tons; Demerara, 140 tons; St. John's (Newfoundland), 193 tons.—A dividend of 1s. 10d. in 12 has been declared in the Bristol Bankruptcy Court in the estate Great-Western Iron Company (limited). A further dividend is promised.

REPORT FROM NORTHUMBERLAND AND DURHAM.

AUG. 8.—Dulness in the general trade of the district is still the prevailing feature; this applies to most of the staple trades, few of which can boast of much activity. It is, of course, the season when the house coal trade and the gas coal trade is expected to be dull, but, in addition to this, the coke trade has become very slack. The price of house coals in London is as good as can be expected at this season. With respect to the steam coal trade, which is the principal coal exported, it is in a better position than any other branch at present. On the Birtley estate, where a company propose to open out a colliery, matters are still in the very curious state last reported. Sinkers are still employed, who go regularly to work each day, and others are employed by the Earl of Durham to prevent their progress; the parties, strange to say, do not come into actual collision, the working party merely carrying the tools to the shaft, and the others relieving them of them by carrying them off the premises. The surface is owned by the Earl of Durham, and he appears to be determined to prevent any opening being made on the lands for the purpose of getting the minerals. It is said he has power of this kind, the arrangement being when he purchased the estate, which is a small one, that the minerals were to be got by outstroke—that is, conveyed underground into the adjoining royalties.

At the meeting of the members of the Northern Institute of Mining Engineers, on Thursday, the President, Mr. Nicholas Wood, occupied the chair. Twenty-six new members were elected, and, altogether, the meeting was of a very interesting character. Mr. Wood, the President, Mr. J. T. Woodhouse, and Mr. J. L. Bell, were appointed to give evidence before the Commission appointed by Government to enquire into the affairs and management of the University of Durham, the object being to get some arrangement made, if possible, by which funds can be got to establish a mining school or college in connection with the University. Messrs. Atkinson and Coulson's paper "On Shaft Tubing" was read, and it will prove of a most interesting and useful kind. Mr. Atkinson's scientific knowledge is well known, and Mr. Coulson has had, perhaps, more experience in sinking and tubing shafts than any other living man. The subject is one of the utmost importance, as few deep shafts can be sunk or properly secured without the aid of metal tubing. The different modes of inserting this tubing are described, with the various appliances necessary for allowing the escape of gas from the internal parts of the tubing; this applies particularly to close-top tubing, which very often requires taps to be inserted to allow a small quantity of water to escape, and gas at the same time. Several instances were mentioned, accompanied by various sections, plans, &c., one showing a shaft in Westphalia, Prussia; in this case, previous to taps being inserted, the gas caused the circles to give way.

We noticed in this letter on July 25 the case of an accident at Monkwearmouth, whereby one man was killed and others injured by an explosion of gas. The verdict of the coroner's inquest being, "That the accident resulted through the passage of the gas, ignited in the inside of the Davy lamp, through

the gauze to the external air." We remarked that it was a very serious circumstance, if true, and, at the same time, expressed an opinion that the alleged fact would not be credited generally by practical men. The subject was introduced on Thursday at the meeting of the Institute, and an animated discussion ensued in the evening. Practical men, as we remarked, will be slow to believe a result which is so very different from their experience. A few years ago a series of experiments were conducted by Mr. Wood and several other gentlemen with the gas in the Killingworth Colliery, also, we believe, in the Wallsend, the results of which experiments showed that under any ordinary circumstances, or any circumstance likely to occur in mines, it was not possible so to pass the flame through the gauze. A full and detailed account of these experiments was published in the Transactions of the Institute, and the subject will be further discussed and means taken to test the lamp, &c. The subject is one of very great importance, and will receive the attention it deserves.

GOVERNMENT MINE INSPECTION.

SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE DISTRICT.—This district is now inspected by Mr. J. P. Baker, but the greater portion of the labour during the period reported upon has fallen upon Mr. Lionel Brough—the newly-appointed Inspector not having entered upon his duties until October. Mr. Brough reports that the year exhibits a diminution to the extent of eighteen deaths, as compared with the preceding year; nevertheless, the total number of persons killed is considerable for a space so small in superficial area, and one producing, comparatively, not a very large supply of coal. It is to be remarked, however, that the two counties, now under notice certainly contain more working pits than are to be found in any other single division of coal mines in all Great Britain. The "miscellaneous" return shows a reduction of exactly 50 per cent. when compared with 1859, but the casualties may be regarded even now as far too numerous.

The Shaft Accidents are in excess of any year since 1855. As expressed in all his previous reports, the true remedy for these dreadful calamities will be to provide all winding shafts with guides, catches, and lifting wickets; to securely fence all other pits of whatsoever kind, and to do away with the use of single link chain. Happily the prohibition of the latter is at length arrived at.

To dissect the list of "Falls of Roof and Coal" would unnecessarily add to the length of the report, but, therefore, the mention of certain peculiarities in the coals under notice, offering at the same time a few suggestions as to the saving of human life in excavating the contents of those valuable and important seams. The thick coal is too lofty to be timbered to its upper measures, therefore it should be worked in twice by that long wall system which is so admirably exemplified at Shutead, near Dudley, and in other parts of this most interesting coal field. By this method timber can be set up as a protection to any and every part of the mine, and the experience proves, but few deaths would thus have to be annually recorded, and infinitely more produce would be yielded by every acre of ground. It would also be accompanied with the further advantage of not leaving ribs and pillars to be picked over and over again, a process that is always replete with danger, and but too often occasions most terrible loss of life. Long wall in the thick coal would by no means interfere with the after-getting off the "heather," the "little gubbin," and the "white stone"; on the contrary, it would facilitate those operations, and render the extraction of the minerals to the full extent as economic, and certainly far more safe for the workpeople. In working the thick coal by pillar and stall a phenomenon presents itself called the "bump"; it is occasioned by the great weight and settlement of the superincumbent strata over vast and lofty openings, and is the fruitful cause of very many fatal accidents. By the "long wall" process bumps would become of more rare occurrence, by reason of less height of excavation, and more equable closing in of the subsidence. This subsidence or "shut" following the faces supplies abundant store of rock for building the gobs, which become a sound and reliable receiver or support for all the strata that lies above, and thus the dangerous bumps are greatly lessened in number, if not entirely done away with. Fall of roof unquestionably follows stall workings, but the closing in is not so equal as in the straight sides of long wall; these latter are of great extent, and come regularly home on the back stroke, and possess the further advantage of lending room for perfectly safe wastes, which the miners can freely enter to get out the "bit" for gobbing. All coal fields are reticulated by a well-known divisional structure throughout the entire strata; a certain regular recurrence of these bears various denominations—in Staffordshire "slip things," in Wales "slips" or "smoother," and in the North of England they receive the name of "backs." In a seam (or congeries of seams) so lofty as the thick coal, where timber cannot be set to the upper beds, these slips are of a terribly dangerous and fatal character. By working this remarkable coal in twice, timber and gob can be made to receive and support any or every measure in the whole series; this must be an unanswerable argument in favour of long wall, as it clearly defines the safety that can be arrived at in such manner of getting the coal. The "new mine and fire-clay coals" also exhibit certain noble seams of more than usual aggregate height, when they come so close together that the intervening bed becomes but of a very moderate thickness. In this case it is usual to work them altogether from floor to roof, and as the "slips" are even more numerous and complicated in these beds than in the thick coal itself, it has ever been his custom to recommend an attempt to apply the long wall system in some modification or other to these particular measures, especially in the neighbourhood of Bradley, Bilston, and Moxley, because from such method of working more coal would be produced per acre, and infinitely fewer accidents would occur.

In many previous reports Mr. Brough has pointed out that an analysis of the lists would always show the great comparative mortality that takes place amongst that class of underground workmen designated "bandmen" or "loaders." The loaders or pikemen are skilled workmen, who well know when to sprag and where to set up timber; whereas these poor loaders are frequently persons who have not been brought up as miners, and too often they are unable to judge of the presence of either danger or safety. The deputies (joggles) should invariably insist on the pikemen daily praying whilst they hole the coals, and should see that abundant timber is set up in the stalls during the cutting, and throughout that lapse of time which takes place whilst they are preparing to throw the coals, then, when ready, timber and sprags can be knocked away. Above all things the doggies should arrange that temporary props be placed to protect the "loaders" whilst they are filling the skips. No extra expense would result from these necessary precautions, as the timber could be used over and over again. No man's life should be imperilled for the sake of a few temporary sticks of pit wood; therefore, by adopting such method, and rendering it a permanent system of the mine, the banesmen would gradually acquire the habit of seeing for themselves whether or not the needful measures had been duly arranged for their safety. As it now is, this class of men too frequently go blindly into the stall to load the skips, never taking into consideration the vast size or the great height of the opening. In this locality death by falls is greatly in excess of that in any other district; but contract arrangement are not so conducive to safety as is the more general mode of arrangement in the North of England and in other extensive coal counties. It seems natural and pardonable that, when a butty is tied down by certain restricted and low prices, he should strive in every way to save his charter; therefore the best way would be to abolish the system altogether. It is for the most part accompanied with the keeping of public-houses, and affords an inducement to the workmen to haunt those places, to their own great degradation, and to the loss of their valuable time and wages. The contract method of getting coal and ironstone is certainly in use in other parts of the kingdom as well as in the district under notice, but then it is by no means that exclusive possession of the pit, and that entire control of the workpeople by the charter-master, that is almost invariably found to prevail in South Staffordshire and East Worcestershire.

It is gratifying to find that the deaths from explosions of fire-damp have been less in number than throughout the previous year; nevertheless it is desirable to realise still further decrease, for the district is not one that comes under the denomination of "damp generally dery." In knocking through colliers do not always reflect that there may be a rash of gas which will fire at a naked candle, even though placed at a considerable distance behind them. Then again, when communication is made, the men are too apt at the moment to take a naked light to see what they have thirled into, and this heedlessness is not unfrequently attended with fatal consequences. Mr. Brough recommends that in this district all thirring operations, and every other of a difficult character, should be performed with the safety-lamp locked, and with that alone. In South Staffordshire the men are not accustomed to lamp coal, or perform any of the common operations of mining, without their own light; but in the district, under notice, to a certain extent they do dislike to the safety-lamp; nevertheless, it is desirable that they always make use of it in any such delicate work as that described. During the period of Mr. Brough's residence in Staffordshire there were but extremely few shafts with guides and cages, but the last time he was in the county he certainly found that an additional few collieries (especially the Messrs. Bagnall's) had adopted the use of this very satisfactory mode of winding; but still the entire number is as yet but insignificant compared with the enormous amount of operations carried on. Nevertheless, there is much to hope from the known kindness and humanity of the Staffordshire coal and iron masters, and there can be no reason to doubt as time goes on, and the purely scientific principles of mathematics, physics, and chemistry become properly explained in the district, that it will surely vie with the others in the adoption of all and every discovery that may have for its object and tendency the saving of human life, and the educational and moral improvement of the working classes.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

THE MARAZION DISTRICT.—THE PRODUCTIVENESS OF LODES IN THIS DISTRICT.—The present mining community are not aware to what extent the mines in this locality were wrought, or the amount of metallic ores raised therefrom in former times. A little to the north-west of Marazion was the Old Wheal Darlington Mine, at one period rich in tin as well as copper ores; on the same lode was Wheal Chippendale, a mine of some importance; east of Wheal Chippendale, Wheal Virgin, a tin and copper mine, also productive of tin and copper ores, though not extensively wrought, owing to the expense of the lode; and to the east of Wheal Virgin is the Rodney Mines, formerly a portion of the Marazion Mines; West Rodney was a rich mine for many years, and the principal support of the district; east of these mines the Tregurtha Downs Mines were partially wrought, yielding both tin and copper ores; further east the Owen Vein Mine, in the year 1830, was wrought by the Marazion Mines Company, and yielded a large quantity of copper ores, and the third time worked; east of this mine the Hallamanning and Croft Gwilt Mines were very productive about 70 years ago. All the foregoing mines are supposed to be wrought from one lode, and yielded mineral to the amount of three to four millions sterling; but the run of mines a little further north are said to have been much richer—Wheal Fortune, Wheal Prosper, Trevarthen Down Mine, Penberthy Crofts Mine, Ennis Wheal Virgin, and the Godolphin Mines; all these mines are said to be on one lode, and extend nearly six miles in length, and yielded principally copper ores to the value of nearly six millions sterling. No doubt but some good mines will again be discovered in this district.

WHEAL SHEPHERDS.—This mine has been inspected and favourably reported upon by Capt. James M. Champion, who describes the company's property as progressing satisfactorily. Smith's shop, carpenter's shop, and count-house are erected, and they are now sinking a surface shaft to come down on the back of the adit level, which has been driven some distance on the course of an east and west lode, from which some good saving work for silver-lead ore has been produced. The lodes of Great Retalack and Duchy and Peru pass through Wheal Shepherds, and there are other valuable lodes, which will be intersected when driving is resumed. From the present appearance of the lode in the adit level, and the character of the surrounding mines, Capt. Champion cannot see why Wheal Shepherds should fail.

SOUTH WHEAL KITTY (Lelant).—The last report from the agent on the mine, which we insert in this week's Journal, must be very satisfactory to the shareholders, who, at no distant period, are likely to have opportunities of selling—if they wish to sell—at a good profit. Of late the shares have been standing under par; but, as instated will shortly be brought to the stamps, or sold as "staff," the character of the mine will rise in the estimation of the public, and the shares, consequently, become valuable. Captain Samuel Mitchell, who is a very good miner, has the utmost confidence in the concern, and so have all the agents who have inspected it. The district of Lelant, in which the mine is situated, stands pre-eminent as a tin district. The mine is near Wheal Margaret, Wheal Mary, Wheal Kitty, and Wheal Reeth, all of which have yielded large profits to their owners.

OLD TOLGUS.—The lode in the 52 west fell off a little since last report, but is again improving, and is now worth full 1 ton of good ore per fathom, with every

prospect of an increase. The lode in the 42 is 2½ ft. wide, composed of a congealed spar, and some good yellow copper ore, and improving. The 52, on new lode, is increasing in size, and is producing blende and mundle.

GREAT WHEAL ALFRED.—At the meeting before the last, I quite agreed with what Mr. Holloway stated about the mine, and that as they then had so rich a course of ore in the winze sinking below the 210, the 220 should certainly be driven on, and the ground laid open. As, however, it appears that the ore in the 210 is only a "floor," or that it dips west far too fast to be ever profitably worked without a new shaft from surface, and that, in the present state of affairs, cannot be thought of, I, therefore, can see no alternative that the committee could have come to other than to stop. —A SHAREHOLDER: Aug. 8.

NORTH ROBERT is now looking well, more especially the tin lode, which is worth 20l. per fm., and likely to further improve. The north tin lode will be seen shortly, and it is hoped that North Robert will become a good mine, and the patient shareholders will be repayed for their great outlay.

THE TRESELYN AND SCADDICK TIN AND COPPER MINES.—Mr. James Lane's notice, in last week's Journal, of the highly promising development of these mines has been confirmed by further accounts received this week. The manager's report will be found under the usual head. Specimens of the tin, taken from the new discoveries, reached the office on Thursday. They are described as equal in bulk and quality of ore to any ever opened in Cornwall at a similar depth. These mines possess somewhat peculiar advantages: they consist of two adits, worked by one shaft, which is erected on the junction ground, and communicates by rods with the copper shaft in the Treselyn and with the tin shaft in the Scaddick, having only one set of buildings, one manager, &c., yet fully efficient in all respects for extending operations, so that with good tin and copper returns, and very moderate costs, the company may calculate on good prospects.

EAST BROOKWOOD MINE.—The lode in the adit is still retaining its same size and value—2 tons per fathom. The men are driving east of the cross-course road, and are in daily expectation of intersecting the lode, a large stream of water issuing from the end. In driving to hill on the intersection greater depth from surface will be obtained, and it is anticipated a more productive lode.

EAST TRESKERRY.—The working of North Treskerby Mine has led to the occupation of a large area of mining ground in all directions. Nearly the whole of the manor of Goonere (1000 acres) has been leased to Scorrier Consols, North Hallenbeggie, Tregallow Consols, East Treskerby, and other mining companies; and in all of these mines the prospects are good, there being in sight mineral in all of them. Within the last few days a copper lode has been cut in East Treskerby of the most promising appearance. In a very short time, it is believed, this mine will figure in the Ticketing Paper. I congratulate the company on their prospects.

At NORTH WREY they have a discovery which may lead to great importance. In cross-cutting from the 38 an east and west copper lode, 3½ ft. wide, has been gained and opened upon about 1½ fm., composed of gossan, white prill, iron, quartz, and mundle. A stone of the gossan has been assayed by Mr. R. W. Jenkin, of Callington, who certifies that it contains—Copper, produce 1½ per cent.; silver, 9 ozs. 6 dwts. 16 grs. to the ton; gold, nil; and adds, "the copper produced is from the small particles of malleable seen in the stone." The same lode has been cut in the new shaft. This is a great discovery, as they have now a junction of three lodes within a few fathoms east of the new shaft.

CLARA UNITED.—By a little discretion on the part of the agent (Capt. Lester), the grievance of an old tenant occupying a woolen factory on this set has been removed. The dispute arose from its water-course cutting off the requisite supply to an old leach which fed a wheel attached to the factory. The disputants being obstinate, the works of the mine were stopped for several months by an injunction of the Court of Chancery, and many poor families were necessarily thrown out of employ. We are pleased to be enabled to award this deserving notice of the wisdom of the concession, by which this difficulty has been permanently and very inexpensively removed.

GREAT CRINNIS.—The lode in the 100 west is still improving; it is being carried for about 7 feet wide, is producing a very congenial spar and yellow copper ore, and is giving every indication of being near a great course of ore. About 40 tons of copper ore will be sampled on Monday.

SOUTH TRESELYN.—What absurd fluctuations occur in the mining market! A few months ago the shares in this mine, with 10s. paid, were selling at 25s., and now, with 2l. 1s. 6d. paid, the shares may be had at 1s. 6d.; and yet the mine is really just in the same state as when first so sold. The lode was, and is, kindly for copper, and a rich deposit may be seen. I advise the company to try the mine, and not be frightened out of their shares by the talk of inexperienced persons.

WHEAL HEARLE.—I am glad to see, by Mr. Holloway's note of last week, that this mine progresses so steadily and well. I hear that the mine is now giving a profit, and in these times it is quite refreshing to be connected with an enterprise promising—giving a profit with the great drop in tin, and holding out promise of large dividends.—A NEW SHAREHOLDER: Aug. 7.

GREAT TREVEDDIE TIN AND COPPER MINES.—An important discovery has recently been made at these mines, which are situated a few miles west of the Caradons, but on the same range of granite hills. There is at this mine an immense tinny lode, 20 feet wide; all the workings have hitherto been carried on above the water level, and without steam-power. Water-wheels of great power, turning sixty heads of stamps, railway, and other appliances, are complete, and when some arrangements have been made for the safe working of the mines, it is not improbable that, with so large a lode—though the tin-stone is not rich—and with such an abundance of cheap motive-power, this mine may rival Dolcoath or Carn Brea, with their numerous costly steam-roads, deep shafts, and long levels. A discovery referred to is a rich canker lode, 2 feet wide, valued at 150l. per fm. It has been opened on by a shaft 5 fms. from the surface, which is sinking on a cross-course to a lode of malleable copper, which will be reached a few fathoms deeper.

BULLER AND BASSET UNITED.—The lode in this mine is undergoing a change; in the 100 east it is 2 ft. wide, and is very kindly for copper ore. In the 80 west the lode is 4 ft. wide, composed of quartz, chlorite, mundle, and spots of copper ore. This lode is very kindly, and ore is expected daily. The mine has been inspected by the Duchy agent, and he has a high opinion of the lode in the 100 east and 80 west. This mine, being in such a rich district, is eagerly watched by all who know the value of an improvement in such a prolific locality.

EAST TYWARNHAILE.—This mine is situated eastward of and adjoining the Great Tywarnhaile Mine, in St. Agnes, so well known in the mining world, and has the same lodes, or some of them, traversing the whole length of the sett. On one of these lodes operations extending to 28 fathoms under the adit (which is about 20 fms. deep) were carried on many years ago. Captains J. Morcom, S. Thomas, and J. Tonkin, in their report on the mine, say—"The length of the lode is about 5 fms. from the adit, and we consider that a small outlay will very soon bring this mine into a paying position; the water being drained to the bottom by the Great Tywarnhaile engine. The 10 is driven east from the main shaft 30 fathoms, where the lode is large, composed of ore, jack, and mundle. The 20 is driven east of said shaft about 50 fms., principally on the north part of the lode, and cut into some places 7 feet, without reaching the south wall—lode as in the 10. The same may be said of the 20 west, driven 10 fathoms from shaft; 20 fathoms east of the shaft a winze is sunk 5 fathoms below the 20, and a level driven east thereof 10 fathoms; a lode 6 feet wide, of the same character as in the levels above. A great deal of the ground in the backs was removed by the former workers on tribute for copper ore. We have taken an assayed sample, which gave a high percentage for copper. We recommend that the bottom levels be driven with all possible speed, as we have an opinion that a mine of considerable magnitude will be opened up, the locality being one of the best in Cornwall." I have been informed that as soon as the whim purchased for the mine has been erected, and the ladders, &c., fixed, copper ore may be raised at once, and quickly sent to market. The advantage of working without any pumping charge is very great. A large sum, I hear, has been offered for a moiety of the mine. A meeting of the promoters and shareholders will be held in a few days, for deciding on measures for a spirited working. The pursuer is Mr. C. B. H. Chacewater, and the assessor, Capt. Stephen Thomas, of Redruth, late agent of Wheal Ellen, previously of Alfred Consols, therefore of the Audley Mines, in Ireland, a man of sound judgment in mining.

THE NORTH HAFOD, OR DEVI'S BRIDGE MINE.—The mines of Cardiganshire have been so distinguished by their success for so many ages, that it may not be amiss to the readers of the Journal to give some account of the construction of lodes that have led to such great results, and that have made the fortunes of so many succeeding generations of miners. I would premise these observations by noticing that the slate in which these veins are embedded is the oldest member of the family of slate, much older than the Cornish, which is only contemporaneous with the old red sandstone, which itself, although a very old rock, considered with reference to the outer crust of the globe that we inhabit, is millions of years younger than the Cambrian strata, which is the rock in which the Cardiganshire lodes are embedded, and it is reckoned by Sir R. I. Murchison and Sir H. De la Beche to be upwards of 3000 fathoms deep. If the lode continue productive through this mass of rock, and I have no doubt they do, although the notion is pooh-poohed by some clever geologists, it is clear that the deepest mine in Cornwall may be considered as only representing the infancy of mining, when compared with mines that in the future of the world's history may be worked in these deep slates. The lodes of this rock are some of them as gigantic as the accumulation of strata in which they exist. The Welsh Potosi lode is made up of laminae 84 feet in thickness, or, as we say in Cornwall, and for all I know, it may be the best way of expressing the size of a vein—it is 84 feet big. The Ironfloyd lode is 60 feet wide, bearing layer after layer from the north to the south wall with the greatest regularity. The Goginan silver-lead lode is from 18 to 20 feet in width, and is a vein of silver-lead mass of solid silver-lead ore for the full width, although the lodes usually are formed with alternating laminae of lead ore and siliceous, or calcareous matter, the galena usually occupying from 2 to 5 or 6 feet in width, encased by divisions of lode-stuff of varying widths, from 5 to 7 or more feet. The Frozoch lode is 33 feet in width; this is one of the peculiar lodes of Cardiganshire, the ore being capped with a rich gossan. Although there is some ferrous matter in almost all the lodes of this county, yet it seldom presents itself in such massiveness as to form bodies on the top of the veins, so common in the Cornish lodes, and so much liked by miners as the precursor of rich mineral ground. The crystallisation of the Frozoch lode is in masses, commencing from the walls, of from 8 to 10 feet in thickness. I have seen much of ore both in the middle and on either side of this famous lode for 10 feet, containing ore of great solidity, and in some places the lode is so full of metal that it has to be taken away for its full width, which is upwards of 5 fathoms, and it is not an easy matter to prop the sides of a lode of such width, there being no timber in this country that for the required length is sufficiently strong to support the walls. The underlie of the lode is 20 in. per fathom to the south, and it is easy to imagine—with a lode upwards of 5 fms. in width, with a rock calculated to be unvarying in its character for 3000 fathoms in depth, when every cubic fathom of the lode contains (say) 40l. worth of ore—what an immense mine will some day be opened at Frozoch. In fact, the lodes of this country are gigantic, both in size and in riches, and this is the reason that scarcely one of the Cardiganshire mines, if, indeed, there be one of them, that has turned up a blank in the mining trials of the country. It is true that, under insufficient trial, some of the veins have been abandoned before the shafts reached the ore; but such was the case in Devon Great Consols and Wheal Buller, and does not afford the slightest evidence of the want of produce in the lodes—for example, Frozoch itself was abandoned after more than one trial, but how was it abandoned? The deepest trial-shaft was not 7 fathoms in depth, but if they had been sunk a few fathoms further eastward, it would have reached the great course of ore.

HOLLOWAY'S PILLS.—STRENGTH RESTORED.—At this season many persons suffer from prostration of strength, arising in general from some disturbance of the digestion. In such cases the alterative properties of Holloway's pills exert the happiest effects in renewing digestive vigour. It is wonderful to witness how the pale and emaciated gain colour and weight under a course of these purifying pills. They stimulate the appetite, augment the secretion of gastric juice, regulate the liver, cleanse the kidneys, act as gentle, yet efficient, aperients, without griping, weakening, or inconveniencing the system. It is a vast majority of cases of debility, arising from no perceptible cause, Holloway's pills, judiciously taken, slowly and certainly restore order, and the invalid soon becomes stout and strong.

THE CENTRAL SNAILBEACH MINING COMPANY (LIMITED).

Capital £100,000, in 10,000 shares of £1 each.
Deposit, 2s. 6d. per share, payable at Messrs. Rocks and Co.'s, Bankers, Shrewsbury, upon application, which will be returned if no allotment be made to the applicant.
For detailed prospectus, see *Mining Journal* of July 7; and Messrs. Phillips and Darlington's report appeared in the *Journal* of July 14.

Prospectuses, copies of the report, and plans of the sett, with further information, may be obtained from Mr. J. M. DAVID DAVIES, or Mr. RICHARD WARDMAN, all of Snailbeach, Shropshire; Messrs. PHILLIPS and DARLINGTON, 26, Gresham-street, London; or from the undersigned, to whom all applications for shares are to be made. Early applications are requested.
SAM. HALEY KOUGH,
Aug. 7, 1861. Shrewsbury and Church-street, solicitor to the promoters.

DODDS' IRON AND STEEL PATENT LICENSING COMPANY (LIMITED).

This company is PREPARED TO GRANT LICENSES on moderate terms for the USE of their PATENT for STEELING RAILS, POINTS, CROSSINGS, MACHINERY, and EVERY DESCRIPTION of IRONWORK.

The process, which is exceedingly reasonable in cost, and gives the most extraordinary durability to the material, has been highly approved of by the following gentlemen, firms, and companies, several of whom have extensively adopted the valuable improvement:—

ROBERT STEPHENSON, Esq.
JOHN BOURNE, Esq.
J. PERRING, Esq.
THOS. E. HARRISON, Esq.
THE GREAT INDIAN PENINSULA RAILWAY COMPANY.
THE NORTH-EASTERN RAILWAY COMPANY.
MESSRS. STEPHENSON AND CO.
THE EAST LANCASHIRE RAILWAY COMPANY.
THE GREAT NORTHERN RAILWAY COMPANY.
THE MIDLAND RAILWAY COMPANY.
THE METROPOLITAN RAILWAY COMPANY have ordered a large quantity of rails by this process.

THE FOLLOWING FIRMS are PREPARED TO EXECUTE ORDERS under the company's patent:—

MESSRS. S. BEALE AND CO., PARK GATE, ROTHERHAM.
MESSRS. DODDS AND SON, ROTHERHAM.
MESSRS. LOSH, WILSON, and BELL, NEWCASTLE-ON-TYNE.
THE EBBW VALE COMPANY, SOUTH WALES.
MESSRS. LEVICK and SIMPSON, NEWPORT, MONMOUTHSHIRE.
MESSRS. LLOYD, FOSTERS, and CO., WEDNESBURY.
THE ISCA FOUNDRY COMPANY, NEWPORT, MONMOUTHSHIRE.

Applications for Licenses can be made to R. COOKE, Esq., at the company's offices, No. 7, St. Paul's, London, E.C., where also testimonials and other information may be obtained.

BAILEY'S PATENT STEAM GAUGE.

This truly valuable invention is most undoubtedly the only gauge ever invented not affected by those atmospheric changes and many other evil influences, which are the bane of all spring, mercurial, and compressed air gauges.

The grand principle of the gauge being founded upon that sublime law of nature, "GRAVITY," which, like all other natural laws, is unerring and unchangeable—it must continue to indicate correctly to an indefinite period of time.

After most critical trials and examinations by some of the most eminent locomotive and stationary engineers, mining and manufacturing companies in this kingdom, it is pronounced by them to be "THE ONLY TRULY INDICATING GAUGE NOW IN EXISTENCE."

HEAD OFFICE: 30, COOPER STREET, MANCHESTER. Mr. Wm. Tate, Sole Wholesale Agent.

ALBION TURRET CLOCK WORKS, SALFORD, MANCHESTER.

TO CAPITALISTS.—MESSRS. LEICESTER AND CO.,

INSPECTORS and VALUERS of MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES to SELECT and INVEST CAPITAL in MINING PROPERTIES, for which they charge 2½ per cent.; and they also COLLECT and TRANSMIT THE DIVIDENDS, charging £5 per cent. on their amount. Messrs. LEICESTER and Co. earnestly call the attention of capitalists to the many opportunities they possess of investing to pay interest £10 per cent. per annum. Shares under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDLTON, *Mining Journal*, 26, Fleet-street, London; or direct through our bankers, the Union Bank of Australia.

ST. JOHN DEL REY MINING COMPANY.

MINERS' FESTIVAL AT MORRO VELHO, IN THE PROVINCE OF MINAS GERAES, IN BRAZIL.

On June 21 the annual festival took place at Morro Velho, at the establishment of the St. John del Rey Mining Company, then the superintendent, Mr. Gordon, gave a general holiday. The grounds were thrown open to the inhabitants of the neighbourhood, who were invited to attend. The day broke with a dense fog, which is customary in these parts, but by nine o'clock a clear sky and propitious weather succeeded. The English workmen, who consist chiefly of Cornishmen, were early in the wrestling ring. The officers and their ladies met at ten o'clock at the house of the superintendent, to wait the arrival of the expected company; about half-past ten o'clock the Barao de Sabara, accompanied by the Guarda Mor, arrived, when the superintendent and officers welcomed him. On proceeding to the dining hall, prepared and decorated for the occasion with the variegated foliage so plentiful in this country, and adorned with the national flags of England and Brazil, Mr. Gordon expressed to the Barao his gratification to see the two flags so closely associated, and the hope that the two nations may ever remain as closely connected in amity and commercial relationship. The Barao was then conducted by the superintendent to the ground selected for the various entertainments, followed by the visitors, including a very large proportion of the civil and military officials of the province and their families, the procession being led by the band. As his Excellency passed the flags were lowered, and salutes were fired, and he was met and cheered by the awaiting company, which amounted to between 2000 and 3000 persons. The ground for the games was on the summit of a hill near the Casa Grande (the residence of the superintendent), where a large course was cleared for the amusements, which were conducted under the direction of Captain Treloar, Mr. Symonds, and Mr. Rowe. The course was clear—the exception of gymnastic poles and flag-staffs arranged in the centre, surrounded with banners and encircled by posts and chains, shaded by branches of trees, each side had its entrance gate. Several booths were erected, and at the western extremity was a large booth with raised platforms, for the reception of the distinguished guests. Others were situated on the southern side of the course, and to the extreme east was a refreshment booth, conducted by Mr. Alexander. The wrestling ring was to the west of the course, and this sport was carried on to mid-day in the best style and temper, prizes being awarded. At one o'clock Mr. Gordon addressed the Barao, and ladies and gentlemen. He said it gave him great pleasure to meet them on this occasion, and he trusted it was only the beginning of such occasions. The company had been formed about 30 years, during which it had experienced the friendly countenance of the people of Brazil, and he trusted another 30 years would not terminate their good relations. On account of the number of visitors it was not possible for all to be seated together, and he, therefore, requested the younger men to give precedence to the elder and to the ladies. The company were then ushered to a sumptuous repast, kindly prepared under the direction of Mrs. Gordon, which neither lacked quality nor quantity.

The Barao de Sabara then proposed the health of the superintendent, Mr. Gordon, and afterwards that of the directors of the company, as well as of the officers and workmen. Mr. Gordon, in replying to these toasts, proposed one to which he knew all present would respond—"The united interests of England and Brazil"—and hoping the two nations would ever continue on the same friendly terms as the present united company which they represented them. He remarked that, as from small beginnings great results followed, so he trusted that the kindly intercourse commenced that day might spread to a much wider extent, and that ultimately the two nations represented by their assembly might become as thoroughly united. Individually, and on the part of the directors whom he represented, he had received the greatest consideration and kindness from the Brazilians, which he was here grateful to acknowledge. That many persons made a community, communities a nation, and he was sure the continuance of this feeling in individuals would greatly conduce to the permanent union and welfare of the two countries. The toast was supported by the Barao, and drunk with three cheers and accompanying vigor. After the health of "Her Majesty the Queen of England," "The Emperor of Brazil," the company returned to the grounds. The entertainments recommended by masked horsemen in gorgeous apparel, with prominent turned up and turned down noses. Masquerade dresses in abundance; the steeds the choice of the stable. The clown was not wanting to assist the equestrians. The audience stared with wonder at a sight which many of them witnessed for the first time. After this followed some native dances of the Mozambique tribe of Africans, which ended with exclamations of respect to their manager. Running between the officers, men, blackmen, and blackwomen; jumping in sacks, wheeling barrows blindfolded, a pig hunt, horsemanship, and various other diversions, brought the day to a close, when candles, fireworks, and a large bonfire, illuminated the scene.

Coffee and refreshments were then served, and the company were conducted to the store-house, the north wing of which had been prepared for a ball. An exhibition of the native workmen, elegantly attired in crimson and gold trimmings, then took place, who went through the stick dances, *dancas de manjournas*, in six parts. The music, though not prepossessing, was well marked in time, aided by the sticks and feet of the performers, the frequent exchanges of them being interesting and exciting. The officers and visitors then opened the ball, which was kept up until a late hour, during which time the frequent report of fireworks was heard. The festival closed by dances, in which the whole of the employees united. It is but just to state that while it lasted the conduct of the men was unexceptionable, no excess in word or act was observed, although strong liquors were at the command of all. No police were to be seen, and the houses of the inhabitants were totally deserted. Some are known to be without locks, and yet nothing was missed.

On June 26 the works again became the scene for an entertainment of the children of the Europeans employed under the company, when they were regaled with tea, and a variety of delicacies. Although some were absent, there was a large congregation of the children, and their appearance was decorous, healthy, and joyous. They were amused with out-door games, suitable for the occasion, and in the evening a concert was given by the members of the Harmonic Society, under the direction of Mr. Meadows, the chief medical officer, who previously entertained the members to a dinner. During the evening the superintendent and the Rev. E. Puttock (the company's chaplain) addressed the children and their parents, alluding to the library and its funds, and the various means for their improvement, and a very pleasant evening terminated at an early hour.

Whilst the bulk of the people of the establishment were enjoying the amusements above referred to, the machinery of the mines, watched over by a very few persons, was kept in full operation, and the important results, amounting to the production of about 150 tons of gold per day, were, through judicious arrangements, in no way interfered with.

MINING IN NOVA SCOTIA.—PRINCE ALFRED'S VISIT TO THE ALBION MINES.—The reception of the Prince, on July 16, was most enthusiastic. On the following morning the party inspected the various mechanical departments on the surface belonging to the mine, and manifested much interest respecting the relative nature of each department. Having completed the surface inspection, they descended the Daulhouse shaft for a stroll in the underground workings, which was protracted for some time, owing, no doubt, to the fact that this vein of coal is unequalled in the world, being 33 ft. in thickness, and of uniform quality throughout. His Royal Highness appeared to take a deep interest in the novel and ingenious application of underground machinery for facilitating operations, and put many important queries respecting them. In one of the bords the Prince took up one of the picks and laboured freely for some time with it on the face of the coal, producing a nice specimen with his own hand labour, which he carefully secured.

Miner's Association of Cornwall and Devonshire.

MINER'S ASSOCIATION OF CORNWALL AND DEVONSHIRE.—The following are the RESULTS of the EXAMINATIONS by the SCIENCE and ART DEPARTMENT of the COMMITTEE of COUNCIL on EDUCATION:—

SUBDIVISION I.—INORGANIC CHEMISTRY.			
Name.	Result.	Teacher.	Medals, or Queen's Prizes.
HENRY WILLIAMS, JUN.	Alma, Truro	RICHARD PEARCE	Second Class.
ALFRED BLENNIKOP	St. Agnes	ditto	Third Class.
RICHARD B. SECULE	St. Just	ditto	Third Class.
JOHN BRYANT	St. Agnes	ditto	Passed.
JAMES ROACH	St. Just	ditto	Passed.
JAMES ROWE	St. Just	ditto	Passed.
WILLIAM ROWE	St. Just	ditto	Passed.

SUBDIVISION II.—THEORETICAL MECHANICS.			
Name.	Result.	Teacher.	Medals, or Queen's Prizes.
HENRY MIDDLETON	Redruth	CHARLES TWITE	Second Class.
WILLIAM SEMMONS, JUN.	Redruth	ditto	Third Class.
WILLIAM D. HOCKING	Redruth	ditto	Passed.
JAMES WICKETT	Redruth	ditto	Passed.
RICHARD W. RUCKARD	Redruth	ditto	Passed.

SUBDIVISION III.—APPLIED MECHANICS.			
Name.	Result.	Teacher.	Medals, or Queen's Prizes.
HENRY CHARLES CARNEILL	Redruth	ditto	First Class.
WILLIAM D. HOCKING	Redruth	ditto	First Class.
WILLIAM WHITE	St. Just	ditto	Second Class.

MINERALOGY, AND ITS APPLICATION TO MINING.

Name.	Result.	Teacher.	Medals, or Queen's Prizes.
HENRY WILLIAMS, JUN.	Truro	RICHARD PEARCE	First Class.
JOHN ROACH	St. Just	ditto	Silver Medal.
RICHARD SEARLE	St. Just	ditto	Second Class.
JOHN HANCOCK, JUN.	St. Agnes	ditto	Third Class.
JOHN ROWE	St. Just	ditto	Third Class.
ALFRED BLENNIKOP	St. Agnes	ditto	Passed.
JOHN BRAY	St. Agnes	ditto	Passed.
JOHN BRYANT	St. Agnes	ditto	Passed.
WILLIAM DAVIES	St. Agnes	ditto	Passed.
WILLIAM ROWE	St. Just	ditto	Passed.
WILLIAM WHITE	St. Just	ditto	Passed.

ROBERT HUNT, Vice-President and General Hon. Sec.

BOROUGH OF LIVERPOOL.

TENDERS FOR SUPPLY OF STONE.—The Health Committee of the Borough of Liverpool are willing to RECEIVE TENDERS for the SUPPLY of STONE for PAVING and for CHANNELS, CURBS, and CROSSINGS, as also for FLAGGING the FOOTWAYS of the BOROUGH.

Full particulars as to the quantities likely to be required, and all other information, may be obtained on application by letter to JAMES NEWLANDS, Esq., Borough Engineer, Public Offices, 2, Cornhill-street, Liverpool. The committee do not bind themselves to accept the lowest or any other tender.

Tenders, sealed and endorsed "Tender for Stone," addressed Health Committee, to be delivered at the office of the Town Clerk, on or before the 14th of Sept. next.

By order, WM. SHUTTLEWORTH, Town Clerk.
Public Offices, Cornhill-street, Liverpool, August 8, 1861.

LONDON AND NORTH-WESTERN RAILWAY.—Notice

is hereby given, that the NEXT HALF-YEARLY GENERAL MEETING of the London and North-Western Railway Company will be HELD at the Euston Station, London, on FRIDAY, the 23rd day of August, 1861, at Twelve o'clock at noon precisely, for the transaction of the general business of the company; and after such general business is concluded the meeting will be made special, for the consideration of, and, if approved, sanctioning a subscription by the London and North-Western Railway Company of £10,000 towards the construction of the Watford and Rickmansworth Railway, under the provisions of the Watford and Rickmansworth Railway Act, 1860.

Dated July 31, 1861.
RICHARD MOON, Chairman.
J. P. BROWN WESTHEAD, Deputy-Chairman.
CHAS. E. STEWART, Sec.

Offices, Euston Station, London.

SOUTH-EASTERN RAILWAY.—The Directors of the

South-Eastern Railway Company are PREPARED TO RECEIVE TENDERS for the SUPPLY of about SEVENTY-FIVE THOUSAND TONS of COOKING COAL, to be delivered free on board at the port of shipment, or in the ports of Folkestone, Whitstable, and Strood.

Forms of tender may be had on application to the Storekeeper, London Bridge Terminus. Sealed tenders to be sent in on or before Wednesday, the 21st inst., endorsed "Tender for Cooking Coal," and addressed to the undersigned. S. SMILES, Sec.
London Bridge Terminus, August 8, 1861.

TIMSBURY COAL WORKS.—WANTED, a CLERK and

ACCOUNTANT, to MANAGE the above WORKS and KEEP the BOOKS of the company, and also to DISCHARGE the DUTIES of TRAVELLING AGENT, his time to be exclusively devoted to them. Security will be required. Character and references must be unexceptionable. Applications, in writing, stating salary required, are to be addressed TIMSBURY COAL COMPANY, Timsbury, near Bath, and must be sent in on or before the 24th inst.—Timsbury, August 8, 1861.

THE SMELTING REDUCTION LIME AND COAL

COMPANY (LIMITED).—AGENT WANTED.—WANTED, AN AGENT for the SALE of STEAM COAL SLACK, produced from the BRINCOED COLLIERY, near MOLD. Applications, stating terms, including providing wagons to receive the coal and slack as they are won at the pit mouth, to be delivered to the undersigned, before Wednesday next, at Nine o'clock A.M.
ISAAC ATHERTON, Sec.
3, Cable-street, Liverpool, August 8, 1861.

TO CAPITALISTS IN CONNECTION WITH THE

COAL AND IRON TRADES.—WANTED, by an IRON and COALMASTER, a PARTNER or PARTNERS, who can furnish about £10,000 by instalments, and keep £5000 to be further brought in, if required, within a period of two or three years, making together £15,000, for a MOIETY of a BIG IRONWORK and EXTENSIVE COAL WORKS, situated in the county of North Wales, which are capable of returning, and with a little further outlay (part of the capital now required) will make a profit exceeding £20,000 per annum fixed, certain, and free from risks. The property is a most eligible one, on the South Wales Railway, near the best Welsh ports, within an 8s. ride of London, and where forge pig and foundry pig of the best quality, as well as tin-plate pig-iron, can be made at an average cost of 35s. per ton, and coal put in the railway wagons on the rail at 3s. per ton, with most extensive markets open. The property is extensive, and contains abundance of the best coal, house, steam, iron making, and coking, as well as black band, claystone, and hematite ore, of which there is a fine field, known as the Llantrisant Mine. The railway passes through the property.—Apply to "E. D., *Mining Journal*, 26, Fleet-street, London, E.C.

ON COMMISSION, SECOND-HAND AND NEW ENGINEERS'

TOOLS, MACHINERY, STEAM ENGINES, BOILERS, MILL GEARING, SHAFTING, RAILWAY, and OTHER PLANT, &c. Parties having property of the above description to dispose of will find the readiest mode of sale by consigning the same to the stores of WHEATLEY KIRK and Co., Albert-street, St. Mary's, Manchester.

N.B.—Particulars of all property so consigned are inserted gratuitously in WHEATLEY KIRK and Co.'s Weekly Circular.

TO BE SOLD, very cheap, TWO ROTARY STEAM ENGINES,

cylinders 24 in. diameter, 24 ft. long, with connecting wheels for working together, or may be separated. These engines would be very suitable for sinking a pit, or for any temporary purpose where great power was required at little cost, requiring no foundation for fixing. They may be run up to 80 revolutions per minute. ONE 10 horse power double cylinder PORTABLE ENGINE, by Clayton, Shuttleworth, and Co., with travelling gear, tender, and water cart.—Apply to Messrs. Wm. SAVORY and Son, High Orchard Works, Docks, Gloucester.

LEAD MINES IN MERIONETHSHIRE.—Some VALUABLE

LEAD MINES are OFFERED FOR LEASE, upon highly favourable terms. There are THREE LEAD MINES beneath the farms of Tyddyn-y-Priddell, Bryn-dinas Dyffryn-gwyn, and Ralltllwyd, in Merionethshire, which are offered for 21 years, for £2000 and a royalty of £1 per ton. The ladies who own the mines have exhausted their capital, and are consequently unable to extend the level, which was commenced and had nearly reached the lode before their father's death. Already 100 tons of ore have been raised from the mine, although the deepest winze is but 15 fms. Lead ore has been discovered for a length of 400 or 500 fms., and no doubt is entertained that with a good trial the mines will turn out well.—Apply to Miss MORRIS, Maengwyn-street, Machynieth; or to Capt. W. WILLIAMS, Ponterwyd, near Aberystwyth.

NEW COLLIERY, NAILSEA, NEAR BRISTOL.

FOR SALE, BY PRIVATE CONTRACT, the WHOLE of the PLANT and MATERIALS at the above colliery, comprising:—
ONE HIGH PRESSURE DIRECT ACTING PUMPING ENGINE, cylinder 45 in. in diameter, and 10 ft. stroke.
ONE HIGH PRESSURE WINDING ENGINE and gear, cylinder 12 in. diameter.
ONE HIGH PRESSURE WINDING ENGINE, cylinder 16 in. diameter.
THREE CYLINDRICAL BOILERS, 41 ft. by 6 ft.
ONE CYLINDRICAL BOILER, 18 ft. by 4 ft.
ONE CYLINDRICAL BOILER, 20 ft. by 3 ft. 6 in.
Hammered iron pumping cranks, T bolts, 19 in., 14½ in., 5½ in., 5 in., and 4½ in. forcing, lifting, and hand pumps; hammered iron straps, double straps and tail joints, buckets, clacks, wrought-iron clatters, lifting screws, chains, large capstan, double-power cap winch, 80 fms. 10½ capstan rope, 8 in. capstan and other ropes, blocks, boring tools, wrought-iron air pipes, iron plates, smiths' bellows and tools, wagons, carts, &c.
To view, apply at the colliery; and for all further particulars, to BODDAM CASTLE, Esq., No. 29, Corn-street, Bristol.

TO BE LET, several VALUABLE MINING SETTS, on the

STEDDFOD PROPERTY, MINERA, near WREXHAM, which are now in the holding of the Executors of the late John Burton, Esq. The present lease expires on the 29th September next. Future leasees may, therefore, commence operations immediately after that date. Lead ore is wrought from every mine in operation on the estate.

Applicants will see on inspection that the property is magnificently intersected with veins, from which large quantities of ore may be extracted to a handsome profit.

Also, TO BE LET ON LEASE, the STEDDFOD LIMESTONE, ROCKS, and KILNS. The Great Western Railway (Minera branch) is in immediate proximity to the property, and for a small outlay a branch line or siding might be made to reach the lime kilns and the face of an inexhaustible limestone quarry, from which a vend of 100,000 tons per annum might be wrought with ease. It can be confidently stated that the quality of the Minera lime cannot be surpassed in any respect. Possession of the rock kilns and mining sets will be given in October next.

Tenders must be sent in up to the 29th September, to the agent, Mr. SNOW, who will accompany eligible parties to Minera to inspect the property.

ISAAC SHONE, Mining Engineer, Grove Park, Wrexham.
N.B.—Surface lands to the extent of 184 acres, with substantial farm buildings, can be let to parties taking the rocks and kilns.

THE BRYNGLAS SILVER-LEAD MINE.

MR. WILLIAM HALL is instructed to sell the above, BY PUBLIC AUCTION, at the Fox Hotel, Shrewsbury, on Thursday, the 15th August, 1861, at Two o'clock punctually, in One Lot.

The property, which is situated about 12 miles from the port of Aberystwyth, and adjoining the mail road to that place, comprises the BRYNGLAS SILVER-LEAD MINE, and the whole of the recently-erected and very VALUABLE MACHINERY (in excellent condition) and MATERIALS, comprising a WATER WHEEL, 56 ft. by 4 ft. breast; a crusher, complete; a drawing machine, 25 fms. of 2 in. rods, chains and bobbles, 75 fms. of 8 in. pumps, 25 fms. of ladders, 7 new jiggers, all complete; slime troughs, 7 cast-steel, 1 ton bridge rails, miners' tools, &c. Also, a counting-house, blacksmiths' shop, and other buildings.

The engine-shaft is sunk 26 fms. from the surface, and driven 25 fms. north on the course of the lode, from which, and other parts of the mine, a considerable quantity of lead ore has been raised and sold.

There is an abundant supply of water, and the machinery, which is nearly new, is of the very best description.

The lease is held for 21 years, from the 25th December, 1858, and the royalty is 1-13th. The mine and machinery may be viewed on application, near Capt. Owen, at the mine, of whom particulars may be had; also of Mr. JOHN WADE, the secretary, at the office, Clarendon, Shrewsbury.

VALUABLE and IMPORTANT ESTATE, containing about 225 acres, at HEDNESFORD and LEACROFT, in the PARISH of CANNOCK, STAFFORDSHIRE, including the celebrated HOTEL, the "CROSS KEYS," at Hednesford, HOUSES, and OTHER BUILDINGS in the village, and LANDS immediately in connection with and adjoining to the Hednesford New Colliery, the Cannock Mineral Railway, and the canal wharf and tramway now in course of formation by the Birmingham Canal Company.

MESSRS. E. AND C. ROBINS WILL SELL, BY AUCTION, on Wednesday, the 21st day of August next, at the Swan Hotel, Wolverhampton, at Four o'clock in the afternoon, the VALUABLE ESTATE, called the CROSS KEYS, at HEDNESFORD, the principal part whereof is freehold and a small portion copyhold, containing about 225 acres, including the HOTEL, TRAINING STABLES, FARM and OTHER BUILDINGS, occupied by Mr. John Wilkins and others. Also, various HOUSES, TRAINING STABLES, OTHER BUILDINGS, and LANDS in and about the village, and extending from the Cross Keys Hotel and Mr. Pigott's Hednesford New Colliery to the line of the Cannock Mineral Railway. The high road from Cannock to Rugeley passes through the estate.

The recently-constructed railways and canals have already advanced the neighbourhood, and occasioned an extensive application of land for villa and general building purposes. Public works in contemplation will confer still further benefits. The large quantity of coal raised on Cannock Chase, and particularly at Mr. Pigott's Hednesford New Colliery, adjoining this property, clearly indicates the existence of mines in the estate, and experienced practical miners have reported them of unquestionable quality and great value.

The enclosure of the wastes now in progress will, as in the case of other parishes that have already been enclosed, most materially alter and improve the character and value of the district. The estate will be first offered in one lot, but if not sold, will be immediately put up in about nine lots.

Particulars, with plans and conditions of sale, will speedily be prepared, and may be procured from Messrs. BARKER, BOWEN, and FRANK, solicitors, 1, Gray's Inn-square, London. Mr. FRANK, land agent, Chartley Manor-house, near Stafford. Mr. BARKER, mineral agent, the Pleck, near Walsall; at the Cross Keys at Hednesford, the Swan Hotel, Wolverhampton; and from E. and C. ROBINS, surveyors and auctioneers, New-street, Birmingham.

TO BE SOLD, BY AUCTION, at the BALLYVIRGIN MINE,

County of Clare, Ireland, on the 29th inst., a first-rate 20 inch cylinder HORIZONTAL CONDENSING STEAM ENGINE, with a 7 tons boiler and outfit, complete; a CRUSHER, having 24 inch diameter rolls, and connections for same; a HAULING MACHINE and connections, and pumping connections; by the eminent engineers, Messrs. Nicholson, Williams, and Co., Bedford Foundry, Tipton, Staffs. The above engine is in perfect order, and has been in use more than two years.

There will also be SOLD the WHOLE of the MINING APPARATUS, consisting of several large pumps, railway iron, patent lever weighbridges, wagons, metal castings, chairs, sheet lead, copper bottomed sieves, copper wire, &c.

Further particulars may be obtained on application to E. PYNORF, Esq., 3, Pinner's-court, Old Broad-street, London; Mr. THOMAS DE LA HUNTY, Ballyvirgin Mine, Ennis; or Mr. RICH. PEARSON, auctioneer, Ennis. Ballyvirgin Mine is midway between Ennis and Tulla, in the county of Clare.—Ennis, July 22, 1861.

NORTH WALES.

TO CAPITALISTS.—A VALUABLE COPPER MINE, near

PORTMADOC, county of CARMARVON, TO BE DISPOSED OF, BY PRIVATE CONTRACT. This mine is distant about eight miles from the shipping port of Portmadoc, and has been worked to advantage some years ago. Since then a tramroad has been constructed to within a mile and a half of the mine. The use thereof, for the transportation of all minerals and goods between the mine and shipping port, is secured at 1s. 6d. per ton. This invaluable acquisition, as compared when last worked, facilitates the development of the mine beyond conception. There are several drivings or levels driven to prove the ground, and also a sink, which exhibits a lode or vein of excellent copper ore, of from 10 to 12 in. wide, and continually widening as it deepens. The ground possesses every indication of its abounding in ore. Capitalists will find this a most secure and profitable investment, at a comparatively small outlay.

Also, a VALUABLE SLATE QUARRY, situated at the entrance of the celebrated Nantlle Vale (where are the most remunerative slate quarries in the Principality of Wales, and to which the railway is within eight miles of the shipping port of Carnarvon, two miles of which is a good turnpike-road, to which the quarry is contiguous, and the remaining six miles is a tramroad for general use. The quarry has been opened many years ago, and worked to profit; it consists of sizable beds of slates, of excellent quality, being a continuation of the celebrated Kilgwyn vein. There is no doubt of its becoming a profitable concern, without undergoing the risk and expense of opening.

For further particulars concerning the mine and quarry, apply to Mr. JOHN JONES, draper and grocer, near Dolbenmaen, Carnarvon.

DERBYSHIRE.

THE ALDERWASLEY FORGE AND WORKS, NEAR THE

AMBERGATE STATION ON THE MIDLAND RAILWAY.—TO BE LET, on a lease for 7, 14, or 21 years, and may be entered upon immediately, the above-mentioned FORGE AND WORKS, with the STORE ROOMS, OFFICES and BUILDINGS, and LINDSAY and SLITTING MILLS, on the right bank of the River Derwent, in the liberty of Alderwasley, and the WATER-WHEELS of 70 horse power and MACHINERY belonging thereto, late in the occupation of Messrs. Mold, who for nearly 50 years carried on a lucrative and extensive business as ironmasters at the said works, together with a newly-erected MESSAGE, or DWELLING HOUSE, very pleasantly situated near the said works, with the green-house, stables, coach-house, and capital garden belonging thereto, and upwards of 30 acres of excellent land, and 15 workmen's houses and counting-house, near or contiguous to the works.

The works are situated within half a mile of the Ambergate station on the Midland Railway, and the Cromford and Belper turnpike-road, the branch railway from Ambergate to Bowley (on which there is a siding and wharf for the use of the works), and the Cromford Canal (attached to which is a wharf also for the use of the works), are all parallel therewith and immediately contiguous thereto, and afford excellent railway and canal transit to and from London, Leeds, Nottingham, Derby, and all parts of the kingdom; and the extension of the railway from Rowley to Buxton, now in progress, will give a direct communication with Manchester, Liverpool, &c.

The works are also available for saw-mills on an extensive scale, or for any other purpose requiring power and facility of transit.

For further particulars, and to treat, application may be made to Messrs. WOODHOUSE and JEFFCOCK, civil and mining

REDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK OF SECOND-HAND MINING MATERIALS FOR SALE, including ironwork for a water-wheel, 40 ft. diameter, 2 1/2 ft. breast. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

PATENT LEVER BREAK, FOR RAILWAY WAGONS. doing away with the objectionable break rack. Can be APPLIED TO EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at 24, Great George-street, Westminster; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE OF GAS AND WATER, and also for DRAINAGE PURPOSES—viz., GREAT STRENGTH, GREAT DURABILITY, and PERFECT INOXIDABILITY, and being non-conductors are not affected by frost, like metal pipes. They are proved to resist a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), are only one-fourth the weight, and considerably cheaper than iron pipes. They are made in 1 ft. lengths, and the joints are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14a, Cannon-street, London, E.C., where sample pipes may be obtained for trial.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED WITH INDIA RUBBER at 25 per mile and upwards. CABLES WARRANTED TO STAND THE USUAL TEST FOR INSULATION. Further particulars as to price of cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E. Copper wire covered with silk, cotton, or any other material, to order.

SARL AND SONS, 17 and 18, CORNHILL, respectfully SOLICIT A VISIT to their magnificent ESTABLISHMENT. The ground floor is more particularly devoted to the display of FINE GOLD JEWELLERY, GOLD and SILVER WATCHES, and FINE GOLD CHAINS. The SILVER PLATE DEPARTMENT is in the gallery of the building, and consists of every article requisite for the table and sideboard. In the magnificent show-rooms is displayed a large and beautiful stock of ARGENTINE PLATE, the manufacture of which has stood the test of 70 years' experience. SARL AND SONS have also fitted up a separate show-room for the display of DRAWING and DINING ROOM CLOCKS of the most exquisite designs. Books containing drawings and prices may be had upon application.

AUSTRALIA AND NEW ZEALAND WHITE STAR EX-ROYAL MAIL CLIPPERS, SAILING FROM LIVERPOOL to MELBOURNE on the 1st and 20th of every month.

Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

Ship.	For.	Register.	Burthen.	To sail.
COMMODORE PERRY	Melbourne & Auckland	2016	6000	Aug. 20.
BLUE JACKET	Melbourne	1559	4750	Sept. 20.
LORD RAGLAN	Melbourne	1900	5500	Oct. 20.

The celebrated clipper, *Commodore Perry*, will be dispatched for Melbourne and Auckland, in New Zealand, as above. She is one of the fastest clippers afloat, and her accommodations for all classes of passengers are superb. For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or to GRINDLAY and Co., 124, Bishopsgate-street, and 55, Parliament-street; or to SEYMOUR, PEARCE, and Co., 116, Fenchurch-street, London.

CANADA AND THE UNITED STATES. ONE HUNDRED ACRES OF LAND FREE TO SETTLERS IN CANADA.—SHORTEST ROUTE via PORTLAND in winter, and QUEBEC in summer, by the CANADIAN MAIL STEAMERS, from LIVERPOOL EVERY THURSDAY, and by first-class ships sailing direct to the wharves of the GRAND TRUNK RAILWAY.—For through passage, and every information, apply to SABEL and SEARLE, 19, Water-street, Liverpool; or at the Grand Trunk Company's office, 21, Old Broad-street, London, E.C.

SAMUEL GRIFFITHS' STAFFORDSHIRE IRON TRADE CIRCULAR. Published every Saturday afternoon. Circulation, 7000 per week. Price 1s. per annum, in advance, post free, being registered for transmission abroad at same price.

The IRON CIRCULAR gives the state of the Market with respect to Pig and Malleable Iron; the Official Prices of Bars, Hoops, Sheets, and most other kinds of Staffordshire Iron; a Report of the Iron Trade throughout England, Scotland, and Wales; the Scotch Pig Market up to the close of the market on the day of publication; the Closing Price of the Funds and the principal Railway Stocks up to two o'clock the same day; a Monthly Report of the Iron Trade in France; a Weekly Report of the 30-day Market, London Discount Market, state of the Foreign Exchanges; the Weekly Return of the Bank of England; the Monthly Return of the Bank of France; a correct Weekly Account of all the Gold Ships at Sea, London Bound; likewise an accurate Weekly Return of all the Gold and Specie received during the week; a Report of the Copper Market, with prices of all kinds; a Report of the Tin Market, with present prices, and the same of Lead and Spelter, every week. The IRON CIRCULAR likewise contains an account of all Failures, Dissolutions of Partnerships, Changes in Firms, Stoppage of Works, Works Recommencing, New Works, or those in course of erection; in a word, the CIRCULAR gives every information connected with the Iron Trade which Mr. GRIFFITHS, whose well-known connection with it, considers would be useful and acceptable to the Ironmaster, the Merchant, the Shipper, Broker, or any other Buyer of Iron. The same may be said with regard to Copper, Tin, Spelter, and Lead. A Tabular Statement will be published with the CIRCULAR every three months, showing the number of Furnaces in and out of blast in all the Iron Districts, the quantity of Iron made, and likewise the quantities of Coal and Ironstone consumed in its production.

Parties wishing to subscribe will send a post-office order, addressed to S. GRIFFITHS, Metal Broker, Wolverhampton, which will include the cost post free to end of this year.

INVESTMENTS IN BRITISH MINES.

Mr. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, giving at the same time the POSITION and PROSPECTS of the MINES at the end of each Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION AND ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, BISHOPSGATE-STREET WITHIN, LONDON, where copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal*. The book will be found extremely valuable.—*Observer*. A valuable guide to investors.—*Herapath*. Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald*. A valuable little book.—*Globe*. Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle*. As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph*. Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times*. To those who wish to invest capital in British Mines, this work is of the first importance.—*Wellsman*. This is really a practical work for the capitalist.—*Stockport Advertiser*. This work enables the capitalist to invest on sound principles; in truth, it is an excellent guide.—*Plymouth Journal*. All who have invested, or intend to invest, in mines, would do well to consult this very useful work.— *Ipswich Express*. Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—*Warwick Advertiser*. We believe a more useful publication, or one more to be depended on, cannot be found.—*Plymouth Herald*. Those interested in mining affairs, or who are desirous of becoming speculators should obtain and carefully peruse the work.—*Monmouth Beacon*. With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald*. Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle*. Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express*. Of great value to capitalists.—*Sunderland Times*. A very valuable book.—*Cornwall Gazette*. All who have invested, or intend to invest, in mines should possess this work. It is deserving the attention of every one who seeks profitable investment of his capital.—*Brighton Examiner*. It is full of carefully compiled and reliable information relative to all the known mines of the United Kingdom.—*Sheffield Free Press*.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER.

Published every Saturday, price 2d., or quarterly 7s. 6d. THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER. Published every morning, price 1d. The best medium for mining, manufacturing, shipping, and trading advertisements in the North of England. Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

THE MECHANICS' MAGAZINE, and Journal of Engineering.


Agricultural Machinery, Manufactures, and Shipbuilding. Published weekly, price 4d., by post, 5d. Office, 166, Fleet-street, London, E.C. The "Mechanics' Magazine" has from its establishment had an extensive circulation, and it communicates, for 4d. per week, far more valuable information, both scientific and practical, than was ever before placed within the reach of even those who could afford to pay six times as much for it.—*LORD BROUGHAM*.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM. BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS. IN STOCK—FOR SALE OR HIRE.

THE RAILWAY CARRIAGE COMPANY, OLDBURY, NEAR BIRMINGHAM. MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK. NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE. LONDON OFFICES.—No. 1, MOORGATE.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS RAILWAY WAGONS FOR HIRE. Apply to the SECRETARY, 3, Newhall-street, Birmingham.

RAILWAY WAGONS.—JONATHAN KETLEY, SOHO CARRIAGE AND WAGON WORKS, NEAR BIRMINGHAM. ALL DESCRIPTIONS OF RAILWAY WAGONS FOR SALE OR HIRE. MANUFACTURER OF ALL KINDS OF RAILWAY IRONWORK.

JAMES RUSSELL AND SONS, CROWN TUBE WORKS, WEDNESBURY, STAFFORDSHIRE. The Original Inventors and First Manufacturers of the Patent Wrought-Iron Tubes for Gas, Steam, Water, &c. Enamelled Tubing, and Glazed ditto. Russell and Howell's Homogeneous Tubes. And agents for G. F. Muntz's Solid Brass Tubes. Every variety of fittings. Trade mark, .

LLOYD AND LLOYD, ALBION TUBE WORKS, BIRMINGHAM. MANUFACTURERS OF PATENT LAP-WELDED IRON TUBES, FOR LOCOMOTIVE, MARINE, AND STATIONARY BOILERS. IMPROVED HOMOGENEOUS METAL TUBES. ALL DESCRIPTIONS OF TUBES AND FITTINGS FOR GAS, STEAM AND WATER, PLAIN, GALVANISED AND ENAMELLED. GUN-METAL STEAM GLAND COCKS, WATER GAUGES, &c.

SHORTTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS OF HOWELL'S PATENT HOMOGENEOUS METAL PLATES FOR BOILERS, LOCOMOTIVE FIRE BOXES, AND TUBES, COMBINING THE STRENGTH OF STEEL WITH THE MALLEABILITY OF COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

FARRAR'S PATENT STEEL COMPANY, WARDEND STEEL WORKS, SHEFFIELD, MANUFACTURERS OF BEST CAST STEEL, MALLEABLE AND MILD STEEL CASTINGS, SUPERIOR CAST-STEEL FILES, &c. CALL THE ATTENTION OF ENGINEERS AND ALL USERS OF FIRST-CLASS STEEL TO THE GREAT SUPERIORITY OF STEEL MANUFACTURED UNDER THIS PATENT. Prices:—
First quality £50 per ton.
Second quality 40
Third quality 30

CORNISH BORER STEEL.—UPWARDS OF ONE HUNDRED AND SIXTY MINES ARE SUPPLIED WITH THIS STEEL, AND THE DEMAND FOR IT IS RAPIDLY INCREASING.—For terms, apply to H. MUMFORD and Co., Forest Steel Works, near Coleford, Gloucestershire. London Agent:—Mr. W. T. HENDRY, 71, Cannon-street West, E.C.

MACKWORTH'S PATENT COAL WASHER OR PURIFIER.—THIS MACHINE WILL EXTRACT THE SHALE AND ALL HEAVY IMPURITIES FROM SMALL COAL AT A COST OF TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. FAT, Temple-gate Works, Bristol; or to Mr. Jos. RYDER, Basinghall-street, Leeds.

COALS.—GEORGE J. COCKERELL AND CO., Coal Merchants to Her Majesty. Cash, 25s. per ton. Best coals only.

GEORGE J. COCKERELL AND CO., Central Office, 13, Cornhill, E.C.

GEORGE J. COCKERELL AND CO., Eaton Wharf, Grosvenor Canal, and Office, 1A, Lower Belgrave-place, Piccadilly, S.W.

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WIRE-ROPE TESTING.

PUBLIC TEST OF A. J. HUTCHINGS AND CO.'S PATENT WIRE-ROPE AT LIVERPOOL, FEBRUARY 27, 1861.

On Wednesday, the 27th of February, a series of EXPERIMENTS ON WIRE-ROPE took place at the Corporation Testing Works, King's Dock. The specimens tested were manufactured by the well-known firm of A. J. HUTCHINGS and Co., of Millwall, London. The Contractors to the Lords of the Admiralty and various foreign Governments, the character of whose rope is so well known in this country, as well as all parts of the Continent. Capt. Ducraft, of H.M.S. *Hastings*, and a number of other gentlemen connected with shipping, were present to witness the experiments, all of which were considered highly satisfactory, and in every respect sustained the reputation of the manufacturers. The following are the results of the experiments:—
An 8 in. rope bore 70 tons WITHOUT BREAKING.
Circumference and breaking strain.

Size. Inches.	Hutchings and Co.'s wire-rope for ships' rigging. Tested Feb. 27, 1861.	Newall and Co.'s Test of Oct. 29, 1860.	Garnock, Bibby, and Co.'s Test, Oct. 29, 1860.
2 1/4	5 tons 15 cwt.	7 tons 15 cwt.	8 tons 16 cwt.
3 1/4	11 " 14 "	—	—
4 1/4	16 " 10 "	—	—
5 1/4	22 " 8 "	—	—
6 1/4	28 " 10 "	16 " 10 "	18 " 5 "
7 1/4	34 " 10 "	18 " 15 "	—
8 1/4	37 " 15 "	—	26 " 10 "

N.B.—The 2 1/4, 3 1/4, and 4 in. ropes were the actual sizes tested. The remaining sizes and strains are comparative.

The above tests certified by Mr. McDonald the Superintendent of the Corporation Testing Works, Liverpool.

GARNOCK, BIBBY, AND CO., MANUFACTURERS OF HEMP AND MANILLA CORDAGE, AND IMPROVED PATENT NON-TWISTED WIRE-ROPE.

G. B. & Co. beg to intimate that they use nothing but Bradley's long-drawn charcoal wire in the manufacture of pit and incline ropes. The quality of this article is well-known, and its superiority was fully proved at a PUBLIC TEST OF WIRE-ROPE, instituted by Messrs. R. S. Newall and Co., at Liverpool, on October 29th, 1860, on which occasion G. B. and Co.'s samples averaged 13 per cent. over their trade card, and were the strongest of all the samples from various manufacturers then tested.—*See Mining Journal*, Oct. 29, 1860.

HEMP AND WIRE-ROPE.

JOHN STEPHENS AND SON, HEMP AND WIRE-ROPE WORKS, ASHFIELD, FALMOUTH, CORNWALL.

MANUFACTURERS OF FLAT AND ROUND HEMP AND WIRE-ROPE, GUIDE RODS FOR SHAFTS, GALVANISED WIRE SIGNAL LINE AND STRAND FENCING, &c., for MINES, RAILWAYS, &c. A first-class medal was awarded to JOHN STEPHENS and SON for their manufactures, by the Royal Cornwall Polytechnic Society, in 1860.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE MEDAL AWARDED TO THE MANUFACTURERS OF THE ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Mining Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE has now a thread wrought into its centre, which, being patent right, infallibly distinguishes it from all imitations, and ensures the continuity of the gunpowder. This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate. Address.—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

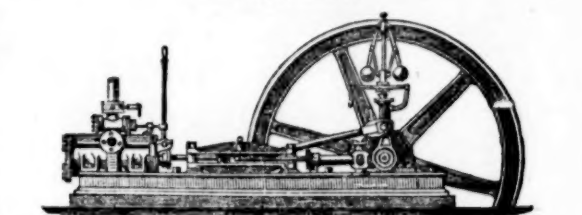
MESSRS. W. BRUNTON AND CO. have great pleasure

in informing their customers and friends, and the mining community, that they have RESUMED MANUFACTURING, at their PENNELLY WORKS, POOL, near CAMBORNE, and are PREPARED as before to SUPPLY SAFETY FUSE OF A QUALITY WHICH CANNOT BE SURPASSED. BRANCH WORKS, BRYMBO, NEAR WREXHAM.

ASSAY OFFICE AND LABORATORIES, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON.

Conducted by MITCHELL and RICKARD (late John Mitchell, F.C.S., Author of *Manual of Practical Assaying*, Metallurgical Papers, &c.) Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c. For amount of fees, apply to the office, as above.

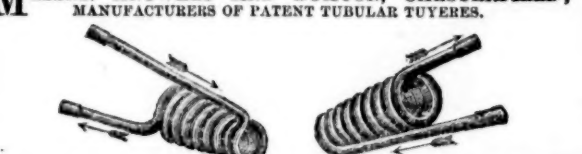
MESSRS. E. PAGE AND CO., VICTORIA WORKS, BEDFORD, AND LAURENCE POUNTNEY PLACE, CANNON STREET, LONDON. MANUFACTURERS OF



HIGH PRESSURE STEAM ENGINES.

from 2 1/2 to 30 horse power, and upwards, adapted for MILLS, AGRICULTURAL, MINING, and GENERAL PURPOSES. The following sizes are ready for immediate delivery, and may be seen at any time at their London depot:—
ONE 8 in. cylinder, 10 in. stroke. ONE 12 in. cylinder, 36 in. stroke.
TWO 8 in. cylinder, 18 in. stroke. ONE 14 in. cylinder, 36 in. stroke.
ONE 10 in. cylinder, 18 in. stroke. ONE 17 in. cylinder, 36 in. stroke.
ONE 14 in. cylinder, 24 in. stroke. TWO 20 in. cylinder, 36 in. stroke.
Prices and full particulars sent on application.

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD, MANUFACTURERS OF PATENT TUBULAR TUYERES.



Having been very successful in MANUFACTURING and REPAIRING the PATENT TUBULAR TUYERES, and securing our patent for a further term of years, we have great pleasure in offering them to the public, at a considerable REDUCTION IN PRICE. Our manner of repairing will make them as LARGE and GOOD AS WHEN NEW (which is not the case with the ordinary tuyere) for half the first cost, when there is not more than two coils destroyed at the nozzle, all parties returning their carriage paid, and are confident they will be the cheapest and best ever offered to the mining world. The PATENT TUBULAR TUYERES having maintained a most honourable reputation since their introduction, and been thoroughly proved to answer all the purposes set forth by the proprietors (when properly treated), it is, therefore, deemed unnecessary to publish a list of the patrons, or enumerate cases of their success. Although by such a procedure very much might be said in their favour, yet the readers would never be so fully convinced of their sterling worth as by a practical trial. The future scale of prices will be as follows, including sockets:—
No. 1 Tuyere, 16 in. long 28s. each.
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Delivered at Chesterfield station. Terms, nett cash quarterly.

TO BRASSFOUNDERS, ENGINEERS, REFINERS, &c.—

The PATENT PLUMBAGO CRUCIBLE COMPANY beg to CALL the ATTENTION of all users and shippers of melting pots to the GREAT SUPERIORITY of the PATENT CRUCIBLES, which have been used during the last three years by some of the largest melters in England and abroad. In addition to their capabilities of melting an average of from 35 to 40 pourings, they are unaffected by change of temperature, never crack, but can be used till worn out, requiring only one annealing for several days' work, and become heated much more rapidly than ordinary pots, EFFECTING thereby a SAVING of more than FIFTY PER CENT. in time, labour, fuel, and waste. The Patent Plumbago Crucible Company also manufacture and import clay crucibles, muffles, portable furnaces, sublimate pans and covers, glass pots, all descriptions of fire-standing goods, and every requisite for the assayer and dentist. Also, sole proprietors of fine POWDERED PURE FLOUR PLUMBAGO, which they can confidently recommend for anti-friction purposes, being an impalpable powder, and warranted perfectly free from grit and any impurity. For ordinary polishing purposes it will be found superior to any of the black leads offered. Price, £27 10s. per ton; 50s. per cwt. Samples of 25 lbs. forwarded on receipt of 8s. Packages free. For Lists, Testimonials, &c., apply to the BATTERSEA WORKS, London, S.W.

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APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, &c. J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—
1.—It utilizes from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.
A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP

at his OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION. OFFICES, 19, MANCHESTER BUILDINGS, WESTMINSTER, LONDON. London, Oct. 10, 1860. Hours, from Ten till Four. J. U. BASTIER, C.E.

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MANUFACTURED BY THE INVENTOR, JOSEPH HALEY, ALBION STREET, GAYTHORN, MANCHESTER.

SCREW JACKS, SHIP JACKS.

SLIDE AND CENTRE LATHES, PLANING, SHAPING, BORING, DRILLING, SCREWING, WHEEL CUTTING, AND OTHER MACHINES.

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A BOON TO NERVOUS SUFFERERS.

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Lectures are ISSUED GRATUITOUSLY by the Professors of the ROYAL INSTITUTE OF ANATOMY AND SCIENCE, 369, OXFORD STREET, LONDON, firstly as a mark of sincere esteem to their distinguished colleague, DR. MARSTON, M.R.C.S., L.S.A., and secondly from a conscientious belief that the lectures will do a vast amount of good, by enlightening the public upon subjects of the highest importance to their moral welfare and physical health, ignorance of which has to the present day been a most fruitful cause of human suffering and misery.

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State the number of the lecture required, and enclose two stamps to prepay postage; or the whole four may be had, neatly bound, 164 pages octavo, post free for six stamps.

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THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock	20 0 0	50	..	12 7 0	0 3 June, 1861
240	Rosebank (tin), St. Just	20 0 0	50	..	33 0 0	1 10 May, 1861
200	Rotalack (tin, copper), St. Just	91 8 0	240	..	443 8 0	2 10 Feb., 1860
1000	Carn Brea (copper), Illogan	15 0 0	67 1/2	65 70	289 10 0	2 0 Feb., 1860
2048	Carnyorth (tin), St. Just	33 0 0	150	..	0 19 4	0 2 Sept., 1860
300	Cornwall Brewey (lead), Cardigan	33 0 0	150	..	0 0 0	0 2 July, 1860
50000	Concorse (copper, sulphur), L. E. 11	1 0 0	355	..	0 0 0	0 2 July, 1860
2160	Cook's Kitchen (copper), Illogan	17 0 0	28	26 27	0 0 0	0 2 May, 1861
12000	Copper Mines of England	25 0 0	25	..	7 1/2 per cent.	Half-yrly.
350000	Ditto ditto (stock)	100 0 0	24	..	1 per cent.	Half-yrly.
1055	Cradock Moor (copper), St. Cleer	8 0 0	28	..	5 13 0	0 5 July, 1861
867	Cwm Erlyn (lead) Cardigan	7 10 0	165	..	5 8 0	1 0 June, 1861
128	Cwmysty (lead), Cardigan	60 0 0	240	..	237 10 0	5 0 May, 1861
200	Darwent Mines (all-lead), Durham	300 0 0	180	..	142 0 0	5 0 June, 1861
1024	Devon (tin), St. Just	123 17 0	510	945 355	760 0 0	7 0 June, 1861
353	Dolcoath (copper, tin), Camborne	123 17 0	510	..	626 10 0	8 0 June, 1861
512	East Basset (copper), Redruth	29 10 0	77 1/2	74 76	87 0 0	5 0 July, 1861
6144	East Caradon (copper), St. Cleer	2 14 6	21	223 1/2 24 1/2	0 17 6	0 10 July, 1861
300	East Darwen (lead), Cardigan	33 0 0	67	..	76 10 0	1 0 June, 1861
2048	East Whel (tin), Wendron	2 10 0	—	..	0 5 0	0 5 July, 1861
1400	Eyan Mining Co. (lead), Derbyshire	5 0 0	—	..	20 3 4	0 10 May, 1861
410	Fowey Consols (copper), Tywardreath	4 0 0	5	..	41 3 0	0 2 June, 1860
2560	Foxdale, Isle of Man, Limited	25 0 0	35	..	61 8 8	1 0 Dec., 1860
6000	Frank Mills (lead), Devon	3 19 4	45 1/2	..	0 11 0	0 3 July, 1861
6000	Great South Tolgus (S.E.), Redruth	0 14 6	25 1/2	27 1/2 3 1/2	7 13 6	0 5 July, 1861
1798	Great Wheel Fortune, Breage	0 14 6	11 1/2	10 1/2 11	1 0 0	0 10 July, 1861
6908	Great Wh. Vor (tin, cop.), Helston (S.E.)	40 0 0	38	..	0 5 0	0 5 May, 1861
1024	Herodasford (id.), near Liskeard (S.E.)	8 10 0	3	33 1/2 34 1/2	14 10 0	2 0 June, 1861
1000	Hibernian Mine Company	92 6 2	—	..	6 15 0	0 15 Feb., 1861
100	Levant (copper, tin), St. Just	2 10 0	95	..	1091 0 0	5 0 May, 1860
400	Lisburne (lead), Cardigan	18 15 0	125	..	372 10 0	2 0 Aug., 1861
9000	Marke Valley (copper), Cardigan	4 10 6	94 1/2	94 1/2 94	1 1 0	0 5 July, 1861
6000	Mendip Hills (lead), Somerset	5 16 0	150	..	2 1 0	0 2 May, 1860
1800	Minera Mining Co. (L.), Wrexham	25 0 0	150	..	71 0 0	4 0 May, 1861
2000	Mining Co. of Ireland (lead, coal)	7 0 0	11 1/2	..	14 7 11	0 7 June, 1861
640	Mount Pleasant, Mold	4 0 0	25	..	12 15 7	1 0 May, 1861
6000	New Birch Tor and Viller Consols	1 6 6	2	1 1/2 2	0 2 6	0 2 May, 1861
1366	North Granbler, Redruth	2 7 6	6	..	0 10 0	0 10 May, 1861
6000	North Great Work, Breage	1 3 0	4 1/2	..	0 2 0	0 2 May, 1860
5000	Oradell (lead), Flintshire	0 8 8	15 1/2	..	0 6 6	0 5 May, 1861
640	Par Consols (cop.), St. Blazey (S.E.)	1 2 6	9 1/2	..	38 4 6	0 5 July, 1861
200	Parys Mines (copper), Anglesey	60 0 0	—	..	7 10 0	2 10 April, 1861
200	Phenix (copper, tin), Llanfyllin	100 0 0	455	..	449 10 0	5 0 May, 1861
1772	Polthero (tin), St. Agnes	10 6 7	35	30 35	6 9 6	0 15 April, 1861
1120	Providence (tin), Uny Lelant (S.E.)	10 6 7	35	..	69 15 0	1 0 May, 1861
16	Rhosomere (tin), Uny Lelant (S.E.)	10 6 7	35	..	1250 0 0	100 0 0
512	South Caradon (cop.), St. Cleer	1 5 0	310	295 305	346 0 0	5 0 May, 1861
512	South Tolgus (cop.), Redruth, Cornwall	8 0 0	40	..	103 10 0	1 0 July, 1861
496	South Wheel Fortune, Illogan	18 18 0	120	110 120	355 5 0	1 0 July, 1861
280	Spernere Moor (tin, copper), St. Just	31 17 0	45	..	9 15 0	1 0 June, 1861
910	St. Ives Consols (tin), St. Ives	8 0 0	30	..	484 0 0	0 15 May, 1861
9600	Tamar Con. (all-ld.), Beaman (S.E.)	4 10 0	15 1/2	..	6 0 0	0 2 June, 1861
6000	Tinctor (cop., tin), Redruth (S.E.)	9 0 0	25 1/2	5 1/2 5 1/2	10 8 6	0 5 Feb., 1861
6000	Tolvalden (copper), Marazion	9 0 0	25 1/2	2 1/2 3 1/2	0 13 0	0 3 May, 1860
672	Trevelyan Consols (tin), St. Ives	11 10 0	12 1/2	..	0 7 0	0 10 Sept., 1860
200	Trumpet Consols (tin), near Helston	57 10 0	100	..	52 0 0	2 0 May, 1861
1024	Wendron Consols (tin), Wendron	11 13 10	16	..	8 15 0	1 0 Jan., 1861
6000	West Basset (copper), Illogan (S.E.)	1 10 0	16	15 17	21 15 0	0 5 July, 1861
60	West Burton Hill (lead), Yorkshire	60 0 0	—	..	14 10 0	3 0 June, 1861
1024	West Caradon (cop.), Liskeard (S.E.)	5 0 0	42	40 42	98 1 5	1 10 July, 1861
256	West Damsel (copper), Gwennap	87 0 0	85	..	45 0 0	1 0 May, 1860
6400	West Fowey Consols (cop.), Camborne	47 10 0	300	280 290	308 0 0	10 0 June, 1861
400	W. Wh. Seton (cop.), Camborne (S.E.)	5 2 6	90	75 80	573 10 0	2 0 Aug., 1861
512	Wheel Basset (copper), Redruth (S.E.)	5 0 0	105	85 95	929 0 0	2 0 May, 1861
500	Wheel Clifford (cop.), Gwennap (S.E.)	—	155	140 150	89 10 0	5 0 April, 1861
2000	Wheel Falmouth and Sperris	2 5 0	8	..	0 10 0	0 10 Feb., 1861
128	Wheel Friendship (copper), Devon	60 0 0	90	..	2400 10 0	5 0 Feb., 1861
512	Wheel Jane (silver-lead), Kea	3 10 0	18	..	10 10 0	1 0 Feb., 1860
1024	Wheel Kitty (tin), Uny Lelant (S.E.)	1 7 2	11	..	8 0 0	0 10 Sept., 1860
4800	Wheel Luddock (lead), St. Ives	2 10 8	2 1/2	2 1/2 2 1/2	65 0 0	1 10 July, 1861
850	Wh. Margaret (tin), Lelant (S.E.)	36 2 6	440	39 41	28 0 0	7 0 June, 1860
100	Wh. Mary (tin), Lelant	36 2 6	440	..	23 17 6	0 10 June, 1861
1024	Wh. Mary Ann (id.), Menheniot (S.E.)	8 0 0	10	8 1/2 9 1/2	275 13 0	5 0 May, 1861
80	Wh. Ovels, St. Just, Cornwall	70 0 0	300	..	41 17 6	2 12 Mar., 1861
6000	Wicklow (copper), L., Wicklow	5 0 0	58	59	..	..

* Dividends paid every two months. † Dividends paid every three months.

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	1 10 0	30	..	0 10 0	0 10 Mar., 1859
5120	Alfred Consols (cop.), Phillack (S.E.)	2 17 1	1 1/2	1 1/2 1 1/2	20 3 0	0 2 April, 1859
1624	Ballicewy (tin), St. Just	11 8 0	12	..	12 0 0	0 5 Jan., 1861
2000	Brightside & Freston (lead), Derbyshire	0 15 0	8 1/2	..	0 4 0	0 0 April, 1861
2500	Central Minera (lead), L. E. 11	0 15 0	8 1/2	..	0 4 0	0 0 April, 1861
6000	Charlotte United, Perranuthnoe	2 3 2	1	3 1/2	0 13 0	0 16 Sept., 1859
2000	Collacomb (copper), Lamerton	5 0 0	12	..	3 5 0	0 8 Dec., 1860
256	Condurow (cop., tin), Camborne	20 0 0	57 1/2	55 60	85 0 0	2 0 June, 1861
256	Copper Hill (copper) Redruth	48 0 0	100	90 95	2 10 0	2 10 Sept., 1859
4076	Devon and Cornwall (copper)	4 18 6	6	..	0 10 0	0 2 Feb., 1859
672	Drake Works (tin), Gwilt	39 2 6	19	..	16 7 6	1 10 Mar., 1857
12500	Drake Works (tin), Gwilt	39 2 6	19	..	0 18 6	0 2 Sept., 1857
2048	East Falmouth (all-ld.), Kewey, Kent	2 16 0	3 1/2	..	0 14 0	0 2 June, 1861
128	East Pool (tin, copper), Pool, Illogan	9 10 0	400	..	305 0 0	2 10 Aug., 1858
6000	General Mining Co. for Ireland (cop., id.)	4 0 0	5	5 1/2	1 0 8	0 3 June, 1853
486	Granbler and St. Aubyn (cop.) (S.E.)	47 10 0	11	..	23 10 0	1 0 July, 1860
119	Great Work (tin), Gernoe	100 0 0	110	..	221 0 0	7 10 Feb., 1857
200	Harward United (lead), Flintshire	40 0 0	10	..	3 0 0	1 10 July, 1860
6000	Hington Down Con. (cop.), Cals (S.E.)	4 16 6	1 1/2	1 1/2 2	2 16 0	0 2 Nov., 1856
5000	Kelly Bray (lead, copper), Callington	4 3 6	1 1/2	..	0 6 0	0 2 Feb., 1860
20	Laxey Mining Company, Isle of Man	100 0 0	1200	..	1420 0 0	0 30 June, 1857
470	Newtown Mining Co., Co. Down	60 0 0	35	..	56 0 0	1 0 Sept., 1858
5000	North Dolcoath (copper), Camborne	2 0 0	1 1/2	..	157 0 0	4 0 Sept., 1853
700	North Roskar (copper), Camborne	16 0 0	20	17 18	2 10 0	0 10 Oct., 1859
1024	Rosewarne and Herland United	11 8 10	24	..	33 10 0	1 0 Sept., 1860
512	Rosewarne United (cop., tin), Gwilt	18 4 4	24	..	0 10 0	0 2 June, 1857
12000	Sordridge Con. (cop.), Whitechurch (S.E.)	0 16 0	148	115 135	60 0 0	20 0 June, 1855
128	South Crinins (copper), St. Austell	19 0 0	285	..	60 0 0	20 0 June, 1855
20000	St. Day United (tin and cop.), Redruth	2 7 0	3 1/2	..	0 3 0	0 1 Feb., 1858
400	United Mines (copper), Gwennap	55 0 0	32 1/2	..	80 5 0	2 10 April, 1860
1024	Value of Tow (lead), Carnarthen (S.E.)	0 13 6	64	..	0 5 0	0 1 July, 1858
1024	West Providence (tin), St. Erth	15 15 0	3 1/2	..	33 0 0	0 10 April, 1857
240	Wheel Hal (tin), St. Just	15 0 0	16	..	4 0 0	0 10 July, 1860
4096	Wheel Edward (cop.), Calstock (S.E.)	7 7 6	2 1/2	2 1/2	0 5 0	0 5 May, 1858
1024	Wheel Grylls (tin), Perranuthnoe	1 4 0	4	..	1 12 0	0 7 Nov., 1859
5000	Wheel Kitty (tin), St. Agnes	4 12 6	1	3 1/2	0 18 6	0 2 July, 1860
845	Wheel Level (tin), Wendron	33 0 0	7	..	31 0 0	1 0 Sept., 1856
1024	Wheel Margery (tin, copper)	15 13 0	4 1/2	..	0 10 0	0 10 May, 1860
396	Wheel Seton (tin, copper), Camborne	58 10 0	65	55 60	131 15 0	1 10 Dec., 1859
1000	Wh. Trevelyan (all-ld.), Liskeard (S.E.)	5 17 6	14	13 14	43 15 0	1 0 Oct., 1860
1022	Wheel Trevelyan (tin, cop.), Gwilt	12 12 6	5	..	10 2 6	0 7 June, 1861
4096	Wheel Wrey Consols (lead), St. Ives	3 9 0	—	..	2 12 6	0 2 Dec., 1857

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0	132	..	265 0 0	5 0 June, 1861
12000	Cobre Copero Co. (cop.), Cuba (S.E.)	40 0 0	37	38 38	97 12 0	1 0 July, 1861
15000	Copper Mining Company, Chili (S.E.)	16 0 0	8	..	6 8 0	0 5 Jan., 1861
70000	East Indian Coal, Calcutta (L.)	10 0 0	10	..	7 1/2 per cent.	Yearly.
25000	English and Scotch (S.E.)	5 0 0	3 1/2	..	1 2 6	0 5 Feb., 1861
25000	Gen. Mining Assoc., Nova Scotia (S.E.)	120 0 0	24	..	18 5 0	1 0 June, 1861
68000	Kapunda Mining Co., Australia (S.E.)	1 0 0	2 1/2	..	8 0 0	0 2 June, 1861
18000	Linares (id.), Pozo Ancho, Spain (S.E.)	3 0 0	7 1/2	..	8 6 2	0 3 July, 1861
10000	Lusitania (of Portugal) (S.E.)	2 0 0	2	..	0 18 0	0 1 Aug., 1861
10815	Marquita and New Granada (S.E.)	1 0 0	1 1/2	..	0 9 6	0 1 June, 1859
100000	Port Phillip (gold), Clunes (S.E.)	1 0 0	1 1/2	..	0 4 0	0 1 July, 1861
11000	St. John del Rey (L.), Brazil (S.E.)	15 0 0	35	35 35 1/2	43 5 0	2 10 June, 1861
20000	West Canada Mining Company (L.)	1 0 0	1 1/2	..	0 2 0	0 2 June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenangen (id.), (L.)	4 10 0	3	..	4 5 0	0 15 Nov., 1853
10000	Bar. Land, Min. & Co. (L.)	4 5 0	3 1/2	..	15 per cent.	May, 1859
10000	Pontigbaud (all-lead), France (S.E.)	20 0 0	4	..	1 0 0	1 0 June, 1855
43174	Unit. Mexican (all-ld.), Mexico (S.E.)	28 5 0	5	4 1/2 4 1/2	1 16 6	0 4 Feb., 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Co.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1 1/2	1 1/2	..Sept. 18
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6	1 1/2	..	..Dec. 18
6000	Central American (silver) [L.]	5 0 0	8 1/2	..	..Feb. 18
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—	..	..Jan. 18
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6	3 1/2	..	..Feb. 18
10000	Copio Smelting [L.] Chili	10 0 0	8 1/2	..	..Fully paid
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	1	..	..Fully paid
30000	East Kongberg Native Silver Mining Co. of Norway [L. £5]	1 0 0	3 1/2	..	..April, 18
30000	Ellerslie and Bardowie, Jamaica	15 0 0	1 1/2	..	..July, 18
30000	English and Canadian Mining Company [L.]	5 0 0	—	..	..Fully paid
25000	Florida (lead), Spain [L.] [S.E.]	2 0 0	2 1/2	..	..Fully paid
30000	Great Northern Copper, South Australia [L. £2] [S.E.]	1 0 0	1 1/2	1 1/2	..Fully paid
4000	Hope Silver-Lead and Copper Mining Co. [L.] Jamaica	25 0 0	—	..	..Fully paid
50000	Imperial Thessalian (lead, &c.), Thessaly [L.]	0 10 0	3 1/2	..	..June, 18
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 10 0	1 1/2	..	..May, 18
60000	New Granada (gold), South America [S.E.]	1 0 0	3 1/2	..	..Fully paid
10000	New Grand Duchy of Baden (silver-lead), near Freiberg	1 0 0	1	..	..Nov. 18
90000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 12 6	3 1/2	..	..June, 18
25000	Panama Silver Mining Company, Mexico [L. £1] [S.E.]	0 10 0	1 1/2	..	..April, 18
85000	Scottish Australian Mining Company [L. £1]	0 10 0	3 1/2	..	..Nov. 18
15000	South Europe Mining Company, Spain [L. £5]	0 3 0	—	..	..May, 18
50000	St. John's United (copper), lead, Newfoundland [L. £1]	0 30 0	4 1/2	1 1/2	..Mar. 18
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, &c. pd., 25,000 L.]	11 0 0	4 1/2	1 1/2	..
1000	Western Africa Malachite (copper) [L.]	12 0 0	—	..	..Oct. 18
12900	Wheat Ellen, South Australia [L. £5]	4 0 0	2 1/2	..	..July, 18
35425	Wheat Jamaica (copper)	1 0 0	1 1/2	..	..Fully paid
90000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	3 1/2	..	..Fully paid